NASA SP-7011 (124)

SPECIAL NOTICE INSIDE

A CUMULATIVE INDEX

TO THE 1973 ISSUES OF A CONTINUING BIBLIOGRAPHY ON

AEROSPACE MEDICINE AND BIOLOGY

JANUARY 1974

(NASA-SP-7011(124)) AEROSPACE MEDICINE AND BIOLOGY: A CUMULATIVE INDEX TO THE CONTINUING BIBLIOGRAPHY OF THE 1973 ISSUES (NASA) 590 p HC $11.00 CSCL 06E

N74-29443

Unclas
00/04 54825

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

SUPPLEMENTS COVERED IN THIS INDEX

Document	*Page Range*	*Date*	*Coverage*
NASA SP-7011(112)	1–39	February 1973	January 1973
NASA SP-7011(113)	41–75	March 1973	February 1973
NASA SP-7011(114)	77–114	April 1973	March 1973
NASA SP-7011(115)	115–152	May 1973	April 1973
NASA SP-7011(116)	153–191	June 1973	May 1973
NASA SP-7011(117)	193–233	July 1973	June 1973
NASA SP-7011(118)	235–273	August 1973	July 1973
NASA SP-7011(119)	275–301	September 1973	August 1973
NASA SP-7011(120)	303–342	October 1973	September 1973
NASA SP-7011(121)	343–379	November 1973	October 1973
NASA SP-7011(122)	381–422	December 1973	November 1973
NASA SP-7011(123)	423–450	January 1973	December 1973

This bibliography was prepared by the NASA Scientific and Technical Information Facility, operated for the National Aeronautics and Space Administration by Informatics Tisco, Inc.

The Administrator of the National Aeronautics and Space Administration has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through July 1, 1974.

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
NASA SP-7011 (124)		

4. Title and Subtitle	5. Report Date
AEROSPACE MEDICINE AND BIOLOGY A Cumulative Index to the 1973 Issues	January 1974 6. Performing Organization Code
7. Author(s)	8. Performing Organization Report No.
9. Performing Organization Name and Address National Aeronautics and Space Administration Washington, D. C. 20546	10. Work Unit No. 11. Contract or Grant No.
12. Sponsoring Agency Name and Address	13. Type of Report and Period Covered 14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstract

This publication is a cumulative index to the abstracts contained in Supplements 112 through 123 of Aerospace Medicine and Biology A Continuing Bibliography. It includes three indexes--subject, personal author, and corporate source.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
Aerospace Medicine Bibliographies Biological Effects	Unclassified - Unlimited

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price*
Unclassified	Unclassified	590	$9.00 HC

*For sale by the National Technical Information Service, Springfield, Virginia 22151

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974—739-161/144

AEROSPACE MEDICINE AND BIOLOGY

A CONTINUING BIBLIOGRAPHY

Abstracts
January–December 1973

TABLE OF CONTENTS

SP-7011 Supplement	Page
112	1
113	41
114	77
115	115
116	153
117	193
118	235
119	275
120	303
121	343
122	381
123	423

SPECIAL NOTICE

The abstract sections of the monthly supplements of *Aerospace Medicine and Biology* can be bound separately. Individual abstracts can be located readily by means of the page numbers given at each entry, e.g., p0149 N73-17110. To assist the user in binding Supplements SP-7011(112) through SP-7011 (123), a title page is included in the back of this Cumulative Index.

NASA SP-7011 (124)

A CUMULATIVE INDEX
TO
A CONTINUING BIBLIOGRAPHY ON

AEROSPACE MEDICINE AND BIOLOGY

This Cumulative Index supersedes the indexes contained in supplements [SP-7011 (112) through SP-7011 (123)] published by NASA during 1973.

Scientific and Technical Information Office
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JANUARY 1974
Washington, D. C.

11a

For sale by the National Technical Information Service
Springfield, Virginia 22151—
For copies mailed to addresses outside the United States, add $2.50 per copy for handling and postage.

Introduction

WHAT THIS *CUMULATIVE INDEX* IS

This publication is a cumulative index to the abstracts contained in NASA SP-7011(112) through NASA SP-7011 (123) of *Aerospace Medicine and Biology: A Continuing Bibliography*. NASA SP-7011, by means of supplements, serves as a current abstracting and announcement journal for references on bioscience and biotechnology. It has been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA), and the National Aeronautics and Space Administration (NASA).
Entries prepared by the two contributing organizations are identified as follows:

1. NASA entries by their STAR accession numbers (N73-10000 series);
2. AIAA entries by their IAA accession numbers (A73-10000 series);

HOW THIS *CUMULATIVE INDEX* IS ORGANIZED

This Cumulative Index includes a subject index, a personal author index, and a corporate source index.

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index:

1. Use (U) references indicate that the subject term is not "postable," i.e., not a valid term, and that the following term or terms are used instead. For example:

 DOSE
 U DOSAGE
 AIRLINERS
 U COMMERCIAL AIRCRAFT
 U PASSENGER AIRCRAFT

2. Narrower Term (NT) references refer the user to more specific headings in the same subject area, under which additional material on the subject may be found. For example:

 FATIGUE (BIOLOGY)
 NT AUDITORY FATIGUE
 NT FLIGHT FATIGUE
 NT MUSCULAR FATIGUE

In addition, a searcher may use the notations of content in the index to narrow further his quest for particular items. This is because subject terms can readily include more than one class of document. For example:

BIOLOGICAL EFFECT
Vibratory force effect upon biological systems, particularly human organism.
Biological effect of cosmic and solar radiations on human body at high altitudes.

illustrates a case where two references on different topics are listed under the same subject term.

HOW TO USE THE PERSONAL AUTHOR INDEX

All personal authors used in the abstract-section citations in the individual Supplements appear in the index. Differences in transliteration schemes may require multiple searching of the index for variants of an author's name. For example:

EMELIANOV, M.D.
and
YEMELYANOV, M.D.

HOW TO USE THE CORPORATE SOURCE INDEX

The corporate source index entries are abridged versions of the corporate sources used in the abstract-section citations in the individual Supplements. The corporate source supplementary (organizational component) does not appear in the index. For example:

NEW MEXICO STATE UNIV LAS CRUCES, DEPT. OF BIOLOGY
(Corporate source at citation)

NEW MEXICO STATE UNIV., LAS CRUCES.
(Corporate source index entry)

IDENTIFICATION OF DESIRED SUPPLEMENT

The abstract and descriptive cataloging for any accession number selected from the indexes may be found in the appropriate Supplement. The page-number range of each Supplement appears on the inside front cover of this index. Once the range of page numbers containing the selected accession number is located in the second column, the desired Supplement number will be found in the first column. For example:

Page 195 will be found in Supplement 117.

AVAILABILITY OF DOCUMENTS

Information concerning the availability of documents announced in *Aerospace Medicine and Biology* supplements is found in the Introduction to the most currently issued monthly supplement.

TABLE OF CONTENTS

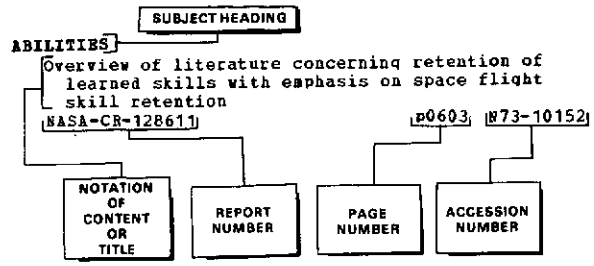
	Page
Subject Index	**A-1**
Personal Author Index	**B-1**
Corporate Source Index	**C-1**

Subject Index

AEROSPACE MEDICINE AND BIOLOGY / *a continuing bibliography* JANUARY 1974

1973 Cumulative Index

Typical Subject Index Listing



The Notation of Content (NOC), rather than the title of the document, is usually used to provide a more exact description of the subject matter. (AIAA occasionally uses the title in lieu of the NOC.) The NASA or AIAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of *Aerospace Medicine and Biology*. The page number indicates the exact page on which the abstract is found. If applicable, a report number is also included as an aid in identifying the document.

A

A-7 AIRCRAFT
Performance evaluation of airborne audio-video recording system as training device in A-7D tactical fighter
[AD-744041] p0605 N73-10161

ABBREVIATIONS
U SYMBOLS

ABDOMEN
Severe intraabdominal injuries without abdominal protective rigidity after an air crash - Seat belt injury
p0356 A73-39209

ABERRATION
Stomach shielding effects on chromosomal aberration frequency in guinea pig and rat marrow cells after gamma radiation at doses of 50 to 200 r
p0213 N73-20074
Machine assisted human chromosome karyotyping and aberration for radiation damage
[ANL-7960-PT-2] p0334 N73-26068
Wing anomalies as result of weightlessness simulation for flour beetle Tribolium confusum
p0367 N73-27952

ABILITIES
Overview of literature concerning retention of learned skills with emphasis on space flight skill retention
[NASA-CR-128611] p0603 N73-10152
Relations between sociometric variables and criteria of ability and behavior of student pilots
p0367 N73-27954

ABIOGENESIS
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319
Book - Molecular evolution: Prebiological and biological.
p0089 A73-17926
The origin of life problem - A brief critique.
p0089 A73-17927
Life origin on earth, considering hydrocarbon molecules and macromolecular synthesis under earth atmospheric evolutionary conditions
p0089 A73-17928
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus
p0090 A73-17929
Space exploration and the origin of life.
p0090 A73-17930
A non-equilibrium thermodynamical analysis of the origin of life.
p0090 A73-17931
Thermodynamics of self assembly - An empirical example relating entropy and evolution.
p0090 A73-17932
The sources of phosphorus on the primitive earth - An inquiry.
p0090 A73-17933
Abiogenic formation of porphin, chlorin and bacteriochlorin.
p0090 A73-17934
Proteins and nucleic acids in prebiotic evolution.
p0090 A73-17937
Model experiments on the prebiological formation of protein.
p0090 A73-17938
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951
Conjugation of proteinoid microspheres - A model of primordial recombination.
p0091 A73-17952
Search for biogenic structures and viable organisms in lunar samples - A review.
p0094 A73-18416
Hydrolysis of aqueous extract of lunar dust samples for identification and quantitation of amino acid precursors in extraterrestrial sources, considering prebiotic evolutionary pathways termination
p0095 A73-18421
Genetic code evolution in terms of abiotic polynucleotide synthesis, suggesting alternating sequences of purines and pyrimidines as polypeptide codes
p0162 A73-23469
Chemical evolution - Recent syntheses of bioorganic molecules.
p0202 A73-26477
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
Book - Molecular evolution and the origin of life.
p0205 A73-27049
Chemical evolution before life deduced from carbonaceous meteorites composition, noting porphyrins, optically active substances and isoprenoid hydrocarbons
p0243 A73-30130
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose

p0396 A73-42166
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077

ABNORMALITIES
NT NEUROSES
NT PSYCHOSES
Aerospace medicine for treating abnormal conditions caused by space flight
[NASA-TT-F-735] p0175 N73-18116
Standardization of tests and classification of color perception abnormalities in military personnel
p0179 N73-19071

ABSORBENTS
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
Development of design information for molecular sieve sorbants regenerative CO2-removal systems for manned spacecraft
[NASA-CR-2277] p0366 N73-27948

ABSORBERS (MATERIALS)
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408

ABSORPTANCE
Reflectance, transmittance and absorbance spectra of normal and six types of maize leaves
[NASA-CR-130032] p0136 N73-16065

ABSORPTION
Absorption of bile acids and cholesterol by polymers
p0191 N73-19976

ABSORPTION BANDS
U ABSORPTION SPECTRA

ABSORPTION SPECTRA
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials
p0280 A73-31549

ABSTRACTS
Abstracts on radiation and health physics
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069

ACCELERATED LIFE TESTS
Prediction of long-term heat-pipe performance from accelerated life tests.
p0384 A73-40438

ACCELERATION (PHYSICS)
NT ANGULAR ACCELERATION
NT DECELERATION
NT HIGH ACCELERATION
NT HIGH GRAVITY ENVIRONMENTS
NT IMPACT ACCELERATION
NT LUNAR GRAVITATIONAL EFFECTS
NT PARTICLE ACCELERATION
NT PHYSIOLOGICAL ACCELERATION
NT TRANSVERSE ACCELERATION
Theoretical model of utricular otolith and associated neural connections to oculomotor system and their response to angular motion with respect to acceleration in shear
[PPRC-1315] p0608 N73-11070
Nervous system functional changes due to forces of acceleration and weightlessness
[NASA-TT-F-733] p0148 N73-17105
Quantitative analysis of irreversible portion of radiation damage combined with gamma rays and acceleration
p0214 N73-20082
Performance of anti-G valve subjected to varying acceleration forces
[AD-760814] p0377 N73-29062
Effect of accelerations on active transport of glucose in small intestine of rats
p0442 N73-33021

ACCELERATION PROTECTION
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786
Positive-pressure breathing as a protective technique during +Gz acceleration.
p0361 A73-39793
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926

ACCELERATION STRESSES (PHYSIOLOGY)
NT CENTRIFUGING STRESS
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights.
p0582 A73-11209
Aerodynamic pumping-caused spinal fractures in two pilots during high speed flight
p0586 A73-12154
DNA catabolism in rat tissues in response to transverse accelerations
p0087 A73-17679
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
Seat reaction direction in an animal centrifuge.
p0116 A73-19478
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours
p0123 A73-20978
The role of vestibulometry in medical evaluation of flight personnel
p0165 A73-23821
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog.
p0196 A73-25337
Changes in visual functions after the action of weak vestibular stimuli
p0209 A73-27719
Prophylaxis and treatment of the motion sickness syndrome
p0240 A73-29410
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation
p0242 A73-30022
Morphological changes in kidneys during exposure to variously oriented accelerations at a level of 4 g for many hours
p0304 A73-34226
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Physiological effects of acceleration and weightlessness during space flight, discussing cardiovascular system, renal function, respiration, blood volume, metabolism, work capacity, etc
[AFOSR-72-2451TR] p0312 A73-35856
Gravitational stress and exercise.
p0313 A73-35980
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915
Inverted posture illusion phenomenon in astronauts during weightless space flight, discussing vestibular organ function, acceleration effects and body gravitation sensing system
p0356 A73-39149
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.

p0423 A73-43216
Analysis of physiological mechanisms contributing to occurrence of motion sickness
p0591 N73-10020
Analysis of acceleration forces produced during aerobatic flight and effects of acceleration forces on human body
[FAA-AM-72-28] p0609 N73-11075
Feasibility of multichannel rheography for studying cardiovascular system on centrifuge
p0065 N73-12094
Subjective effects of sustained acceleration, including positive, negative, forward, backward, and lateral acceleration effects
p0105 N73-15095
Prolonged bed rest and positive radial acceleration effects on human visual response time
[NASA-TN-D-7161] p0107 N73-15117
Human semicircular canal response to rotational stimuli in yaw, pitch, and roll planes of the head
p0109 N73-15137
Anti-compensatory oculomotor responses in human visual tracking and vestibulo-ocular mechanism during rotational head movement in flight
p0110 N73-15140
Oculogravic illusion factor in theoretical model of pilot control loss in jet aircraft
p0110 N73-15142
Vestibular neuron response to rotational stimuli in space flight environment
p0111 N73-15150
Effect of accelerations on thiamine S-35 distribution in organs, tissues, and subcellular structures of white mice
p0133 N73-16044
Morphological changes in juxtaglomerular apparatus in kidneys of rats during multihour exposure to accelerations in different directions
p0133 N73-16045
Effects of hypoxia and acceleration stresses on enzyme activities in erythrocytes and blood plasma
[DLR-FB-72-71] p0137 N73-16070
Transverse acceleration effects on rat hepatocytic structures
p0181 N73-19086
Mental and cardiovascular acceleration stress effects on heart rate studied by beta adrenergic blockage
p0188 N73-19149
Human pituitary and adrenal hormone reserve in acceleration stress tolerance
p0188 N73-19150
Measurements of acceleration stress effects on pilot maneuvering ability and flight control performance
[AMRL-TR-72-3] p0189 N73-19154
Positive pressure breathing for increased human acceleration tolerance
p0189 N73-19156
Bradycardia and death in guinea pigs exposed to acceleration overloads after injections of aminothiol group radioprotectors
p0211 N73-20057
Transverse acceleration overload effects on mice sensitivity to toxic doses of cysteamine and aminothiol group antiradiation drugs
p0212 N73-20061
Functional changes in systemic and cerebral hemodynamics with respect to vestibular stresses accompanying low accelerations
p0217 N73-20108
Lower body decompression effects on cardiac cycle and human acceleration tolerance
p0263 N73-23037
Acceleration effects on human visual functions under hypoxic conditions
p0263 N73-23040
Effects of weightlessness and acceleration on human body during space flight
p0371 N73-29022
Morphological changes in rat kidneys exposed to different accelerations
p0372 N73-29023
Impact acceleration effects on rabbit central nervous system
p0372 N73-29024
Physical/mathematical analyses on human vestibular responses to acceleration stresses
p0373 N73-29033

Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030
Using lower body negative pressure to prevent decrease in volume of circulating plasma during hypokinesia
p0444 N73-33036

ACCELERATION TOLERANCE
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
Direction-specific adaptation effects acquired in a slow rotation room.
p0049 A73-14154
Changes in cardiac rhythm during sustained high levels of positive /+Gz/ acceleration.
[AD-754146] p0050 A73-14157
Effect of hydrochlorothiazide on +Gz tolerance in normotensives.
p0050 A73-14159
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation.
p0058 A73-15218
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog.
p0196 A73-25337
Gravitational effects on biological systems in terms of animal body size, age, sex and posture as factors affecting acceleration tolerance
p0197 A73-25573
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Some aversive characteristics of centrifugally generated gravity.
p0238 A73-28506
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems
p0280 A73-31518
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Normalisation of haemodynamic changes caused by action of prolonged accelerations in rats.
p0314 A73-35985
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106
Positive-pressure breathing as a protective technique during +Gz acceleration.
p0361 A73-39793
Gravitational effects on animal ontogeny from centrifugation studies of acceleration tolerance, considering egg and embryo development, body composition, etc
p0397 A73-42174
Chronic acceleration effects on homeotherm physiological adaptation in terms of body weight, tolerable field intensity, growth and fat deposition inhibition, etc
p0398 A73-42177
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Mechanical response of otolith-dependent units of cats to sinusoidal linear acceleration
[AMRU-R-69-3] p0608 N73-11068
Cellular activation energy effect in rat tolerance to acceleration stress
[AD-749338] p0100 N73-14079
Semicircular canal plugging response in cats to rotary stimulation

p0111 N73-15151
Hypodynamia effect on human transverse acceleration tolerance
p0181 N73-19083
Sound, light, and proprioceptive stimuli for inhibiting vestibular illusion in man
p0181 N73-19087
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Effects of antiradiation drug dosage on mice and rat tolerance to transverse acceleration overloads
p0211 N73-20055
Resistance of mice to acceleration overloads after injection of aminothiol group radioprotector
p0211 N73-20056
Hypoxia and reduced acceleration tolerance of rats after injection of cysteamine radioprotector
p0211 N73-20058
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature
[NASA-TT-F-14861] p0219 N73-20123
Conditioned reflex motion sickness test of statokinetic fitness for flying personnel
p0254 N73-21994
Barany chair rotation for acceleration tolerance testing on flying personnel
p0254 N73-21995
Computation of coriolis forces in selecting flying personnel for vestibular tolerance
p0263 N73-23042
Distribution parameter model for acceleration forces acting on arterial system
[AD-756530] p0294 N73-24128
Aerial combat acceleration environment testing of human performance capability using human centrifuges
[AD-759174] p0300 N73-25134
Acceleration effects on mechanical impedance of human body in supine position
p0368 N73-27963
Mathematical simulation study of neuron response to vestibular analyzer exposed to periodically varying acceleration
[NASA-TT-F-15130] p0420 N73-31015

ACCELEROMETERS
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134] p0142 N73-16104

ACCEPTABILITY
Verification program for Inflight Blood Collection system
[NASA-CR-128645] p0067 N73-12112
Functional relationship between food preference and frequency of repetitious eating
[AD-749079] p0102 N73-14100

ACCEPTANCE
U ACCEPTABILITY

ACCIDENT INVESTIGATION
NT AIRCRAFT ACCIDENT INVESTIGATION

ACCIDENT PREVENTION
Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license
p0582 A73-11238
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel
p0303 A73-34078
The effects of fatique on health and flight safety.
p0303 A73-34080
Anthropometric dummy design improvements, detailing verisimilitude specifications for harness support in accident tests and design of chest, spine, shoulder and pelvic areas
p0306 A73-34617
Objectives of training in relation to accident prevention.
p0326 A73-36850
Annex 13 and the work of the aviation pathologist - Practical problems.
p0347 A73-37739

ACCIDENT PRONENESS
Personal life changes and health stresses in contrast to accident proneness as factors in pilot error
p0083 A73-16732
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth
p0307 A73-34746

ACCIDENTS
NT AIRCRAFT ACCIDENTS
NT AUTOMOBILE ACCIDENTS

ACCLIMATIZATION
NT ALTITUDE ACCLIMATIZATION
NT COLD ACCLIMATIZATION
NT HEAT ACCLIMATIZATION

ACCOMMODATION
NT VISUAL ACCOMMODATION

ACETANILIDE
The pharmacology of practolol - A cardioselective beta adrenergic blocking drug.
p0153 A73-21850

ACID BASE EQUILIBRIUM
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232

ACIDOSIS
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785

ACIDS
NT AMINO ACIDS
NT ASCORBIC ACID
NT BUTYRIC ACID
NT DEOXYRIBONUCLEIC ACID
NT FATTY ACIDS
NT GLUTAMIC ACID
NT HYDROCYANIC ACID
NT HYDROFLUORIC ACID
NT LACTIC ACID
NT LEUCINE
NT LYSINE
NT METHIONINE
NT NUCLEIC ACIDS
NT OXIDASE
NT PEPTIDES
NT PHOSPHORIC ACID
NT PYRIDINE NUCLEOTIDES
NT PYRUVATES
NT RIBONUCLEIC ACIDS
NT THYROXINE
NT TRYPTOPHAN

ACOUSTIC ATTENUATION
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815

ACOUSTIC FATIGUE
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101

ACOUSTIC IMPEDANCE
Study of the acoustic reflex in human beings. I - Dynamic characteristics.
p0581 A73-10828
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity
p0244 A73-30279

ACOUSTIC MEASUREMENTS
Noise standards for habitable houses, rest homes, hospitals, camps, public facilities, and streets in residential areas
[NASA-TT-F-15065] p0414 N73-30088
ACOUSTIC PROPERTIES
NT ACOUSTIC IMPEDANCE
NT REVERBERATION
NT SOUND INTENSITY
Acoustic measurement and recording system for noise generated by air bag automobile safety device
[AD-761836] p0370 N73-27977
ACOUSTIC RADIATION
U SOUND WAVES
ACOUSTIC SCATTERING
NT REVERBERATION
ACOUSTIC SIMULATION
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
ACOUSTIC STABILITY
U FREQUENCY STABILITY
ACOUSTIC VIBRATIONS
U SOUND WAVES
ACOUSTICS
NT BIOACOUSTICS
NT PSYCHOACOUSTICS
NT UNDERWATER ACOUSTICS
Acoustic model and linguistic, syntactic, lexical and semantic factors in speech perception and production process
p0243 A73-30277
ACOUSTO-OPTICS
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
ACQUISITION
NT DATA ACQUISITION
NT TARGET ACQUISITION
ACTH
U ADRENOCORTICOTROPIN (ACTH)
ACTINIDE SERIES
NT PLUTONIUM 238
ACTINOGRAPHS
U ACTINOMETERS
ACTINOMETERS
NT INFRARED DETECTORS
NT SPECTROPHOTOMETERS
Potassium ferrioxalate actinometric measurements of solar ultraviolet photobiological energy
p0292 N73-24113
ACTINOMYCIN
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650
ACTIVATION (BIOLOGY)
Action of a serum protein on muscular contraction.
p0125 A73-21200
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782
Factors influencing reactivation of phosphorylated acetylcholine esterase by oximes
[BMVG-FBWT-72-32] p0187 N73-19137
ACTIVATION ANALYSIS
NT NEUTRON ACTIVATION ANALYSIS
ACTIVATION ENERGY
Cellular activation energy effect in rat tolerance to acceleration stress
[AD-749338] p0100 N73-14079
ACTIVITY (BIOLOGY)
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861
Biodegradation from evolution viewpoint as physiological function and fundamental cellular process regulating biological equilibrium, explained by intracellular digestion and phagocytic cells association
p0385 A73-41024
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man
p0401 A73-42656
ACTIVITY CYCLES (BIOLOGY)
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263
Effect of hypergravity on the circadian rhythms of white rats.
[ASME PAPER 72-WA/BHF-14] p0061 A73-15877
Biological clocks in animal orientation and in other functions.
p0089 A73-17825
Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/.
p0282 A73-32185
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357
Serotonin content variations in the fore-brain during hibernation
p0322 A73-36567
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Similarities and differences concerning the sleep of two baboons, Papio hamadryas and Papio papio
p0359 A73-39764
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179
Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle
p0064 N73-12089
Activity cycle data for spacecrews of Soyuz 3 to 9 spacecrafts before, during and after space flights
[JPRS-58173] p0137 N73-16068
ACTUATORS
A linear motion generator for physiological research.
p0577 A73-10173
ACUITY
NT VISUAL ACUITY
ADAPTATION
NT ALTITUDE ACCLIMATIZATION
NT COLD ACCLIMATIZATION
NT DARK ADAPTATION
NT DESERT ADAPTATION
NT LIGHT ADAPTATION
NT RETINAL ADAPTATION
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHF-11] p0061 A73-15878
Study of the peripheral auditory adaptation in a psycho-acoustic experiment
p0164 A73-23807
Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization.
p0204 A73-26749
Direction-specific adaptation effects acquired by humans in slowly rotating room
[NASA-CR-129063] p0591 N73-10062
Mathematical models for studying vestibular adaptation to stimuli in humans
[AMRU-R-70-1] p0607 N73-11062
Physiological factors of human vestibular adaptation to flight and space environments

p0110 N73-15146
Hypoxia adaptation of rats for increased resistance to toxic atmospheric gases
p0183 N73-19100
Adaptability and receptivity factors affecting motion sickness susceptibility in pilots
p0225 N73-21095
Physiological adjustments to environmental factors [AD-753913] p0261 N73-22059
Low temperature tolerance and adaptation of biological systems to space environment [JPRS-59129] p0265 N73-23055
Physiological and hemodynamic adaptations to CO levels and exercise in nonsmoking normal men [PB-213834/1] p0267 N73-23073
Handedness and adaptation to distortions of size and distance underwater [AD-759722] p0337 N73-26098
Role of respiratory enzymes on human adaptation to hypoxia [NASA-TT-F-15058] p0411 N73-30060
Psychoneurological problems in adaptation by man to modified diurnal regimes
p0444 N73-33031

ADAPTIVE CONTROL
NT LEARNING MACHINES
NT SELF ADAPTIVE CONTROL SYSTEMS
Need for within-trial feedback as a function of task similarity in adaptive training of manual control.
p0081 A73-16709
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
Stability behavior of adapting and untrained random logic nets, enabling intelligent interaction with environment
p0122 A73-20400
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004
Operator response to sinusoidally varying normal and emergency cycles in dynamic control task, testing anticipatory aversion response ability and error response
p0393 A73-41885
Probability estimate models for reliable function of redundant systems with adaptable and inadaptable neuron-like restoration organs
p0431 A73-44904
Hybrid computer identification program for visual display of adaptive control state to human operator
p0598 N73-10109
Random Gaussian distribution for input noise approximation in human response tracker modeling
p0598 N73-10110
Human factors criteria for adaptive computer aiding in man-machine control system [AD-754835] p0222 N73-20147
Quantitative evaluations of adaptive physical operator/manipulator control systems
p0336 N73-26090
Automative adaptive flight training, using instrument flight maneuvers [AD-759366] p0341 N73-27080
Versatile ergometer with work load control [NASA-CASE-MFS-21109-1] p0366 N73-27941

ADAPTIVE CONTROL SYSTEMS
U ADAPTIVE CONTROL

ADDITIVES
NT ANTIOXIDANTS

ADENINES
NT RIBONUCLEIC ACIDS
Adenin-nucleotides NAD(plus) and NADH in skeletal muscles during intensive work and at rest [NASA-TT-F-14856] p0219 N73-20118

ADENOSINE DIPHOSPHATE (ADP)
Adenonucleotides, NAD+, and NADH in skeletal muscles during intensive work and at rest
p0116 A73-19475

ADENOSINE TRIPHOSPHATE (ATP)
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat.
p0587 A73-12187
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
Adenonucleotides, NAD+, and NADH in skeletal muscles during intensive work and at rest
p0116 A73-19475
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain
p0389 A73-41278
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732
Luciferase ATP assay procedure for determining bacterial infections in urinary tract [NASA-CR-130797] p0173 N73-18096
Automatic device for assaying urine on bacterial adenosine triphosphate content [NASA-CASE-GSC-11169-2] p0438 N73-32011

ADENOSINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle.
p0385 A73-41130

ADIPOSE TISSUES
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters
p0156 A73-22649

ADJUSTING
Human operator adaptive behavior in slowly changing dynamic system [AD-748243] p0102 N73-14097

ADJUSTMENT
U ADJUSTING

ADRENAL GLAND
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy

p0357 A73-39400
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661
Dystrophic degeneration of suprarenal rat cortex during hypokinesia
p0254 N73-22003

ADRENAL METABOLISM
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645
Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators
p0174 N73-18111
Temperature and noise irradiation effects on human energetic metabolism during vigilance task
p0189 N73-19155
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826] p0216 N73-20093
Human hydroxycorticosteroid and aldosterone excretions during hypodynamic space flight conditions
p0373 N73-29031
Effect of physical and psychological stress on urinary excretions of adrenal hormones in normal man
[NASA-TT-F-15046] p0374 N73-29043
Water load tests for determining hydration status and adrenal and kidney functions during post flight period
[NASA-TT-F-15091] p0417 N73-30998

ADRENALINE
U EPINEPHRINE
ADRENERGICS
Time course of pulmonary vascular response to hypoxia in dogs.
p0120 A73-20168
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations
p0321 A73-36546
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Mental and cardiovascular acceleration stress effects on heart rate studied by beta adrenergic blockage
p0188 N73-19149
Increased toxicity of sympathomimetic amine stimulants on spinal reflexes in irradiated frogs
p0212 N73-20063
Epinephrine oxidation and indole production during high pressure oxygen poisoning
[AD-759405] p0339 N73-27061
ADRENOCORTICOTROPIN (ACTH)
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661
Human adrenocorticotropin level measurements as indication of adaptation to space flight stress
p0174 N73-18109

ADSORPTION
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972
Spacecraft polyurethane foam jacket sterilization by gas method, discussing ethylene oxide and methyl bromide sorption and desorption
p0395 A73-42160

AERIAL IMAGERY
U AERIAL PHOTOGRAPHY
AERIAL PHOTOGRAPHY
Strip photography used in simulation study of very low altitude detection of small stationary targets at very slow speeds
[AD-754928] p0222 N73-20146
Color and color infrared aerial photographic detection of Dutch elm disease
p0297 N73-25110
Scale, haze, and image motion effects on human performance in photointerpretation of aerial photography
[AD-763908] p0440 N73-32024
AERIAL RECONNAISSANCE
Evaluation of device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103
Strip photography used in simulation study of very low altitude detection of small stationary targets at very slow speeds
[AD-754928] p0222 N73-20146
AEROBES
Ultraviolet space irradiation effects on Aeromonas proteolytica extracellular enzyme production
p0292 N73-24111

AERODYNAMIC CHARACTERISTICS
NT AERODYNAMIC DRAG
NT AERODYNAMIC STABILITY
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787

AERODYNAMIC DRAG
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576

AERODYNAMIC FORCES
NT AERODYNAMIC DRAG
AERODYNAMIC NOISE
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098

Airborne noise in aerospace operations and bioacoustics effects on man
p0148 N73-17100
Analysis of human reactions to short takeoff aircraft aerodynamic noise for predicting community acceptance of short haul air service operations
p0441 N73-32960

AERODYNAMIC STABILITY
Aerodynamic pumping-caused spinal fractures in two pilots during high speed flight
p0586 A73-12154

AERODYNAMIC VEHICLES
U AIRCRAFT

AEROEMBOLISM
Pathogenesis of some respiration and circulation reactions to barometric pressure gradients
p0123 A73-20980
Changes in the vascular tone of certain organs during experimental embolism of pulmonary circulation
p0154 A73-22366
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534
Oxygen breathing in decompression sickness and remedial recompression of human beings
[DRIC-TRANS-3095] p0334 N73-26069
Extreme aeroembolism case and successful therapy in hyperbaric chamber
p0368 N73-27959

AEROMAGNETISM
U GEOMAGNETISM

AEROSINUSITIS
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus nematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538

AEROSOLS
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications
[AD-751425] p0140 N73-16090

AEROSPACE ENGINEERING
Use of space technology to solve medical problems and improve medical equipment
p0075 N73-13848
Aerospace technology for solving domestic solid waste disposal, water purification, and water recovery problems
p0075 N73-13849
Space technology for developing ground based integrated medical laboratory
p0075 N73-13851
Structural vibrations in aerospace operations and effects on man
p0148 N73-17099
Cost effectiveness of water reclamation subsystem in advanced aerospace life support systems
[NASA-CR-124098] p0177 N73-18134
Water reclamation and waste disposal technology applied to land use and aerospace engineering
[NASA-CR-128857] p0190 N73-19158
Waste disposal and water reclamation technology for land use and aerospace engineering application
[NASA-CR-128858] p0190 N73-19159

AEROSPACE ENVIRONMENTS
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
Space environment effects on human life and biochemical evolution study in aerospace medicine and biology, noting amino acid molecules synthesis
p0056 A73-14589
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system
p0089 A73-17775
Aviation medicine assessment of environment effects on pilot responsiveness, task performance and flight safety predictability, considering temperature, oxygen, gravity, acceleration, pressure and stress effects
p0193 A73-25039
Physiological factors of human vestibular adaptation to flight and space environments
p0110 N73-15146
Aerospace medicine for treating abnormal conditions caused by space flight
[NASA-TT-F-735] p0175 N73-18116
Research in space biology and medicine
[JPRS-58620] p0216 N73-20094
Human performance and life support engineering for space environment conditions
[AD-754216] p0224 N73-20157
Apollo 16 microbiological experiment on microbial response to aerospace environments - Part B
p0232 N73-21762

AEROSPACE INDUSTRY
NT AIRCRAFT INDUSTRY
Results from employment workshop program for unemployed aerospace engineers and scientists
[PB-209366] p0605 N73-10168

AEROSPACE MEDICINE
Space environment effects on human life and biochemical evolution study in aerospace medicine and biology, noting amino acid molecules synthesis
p0056 A73-14589
Russian book - Biomedical problems of space flights: Index of domestic and foreign literature.
p0062 A73-16034
Developments in space medicine.
p0086 A73-17569
Military contributions to aviation medicine.
[AIAA PAPER 73-68] p0086 A73-17636
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Civil aviation medicine in the coming decade.
p0117 A73-19484
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus nematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538
Civil aviation medicine functional standardization and expansion, emphasizing preventive medicine, health education and operational safety
p0170 A73-24718
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Russian book - Engineering psychology in aviation and astronautics.
p0278 A73-31375
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Annual Scientific Meeting, Las Vegas, Nev., May 7-10, 1973, Preprints.
p0287 A73-33421
International Congress of Aeronautical and Space Medicine, 20th, Nice, France, September 18-21, 1972, Reports
p0327 A73-36901
Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc
p0345 A73-37398
Annex 13 and the work of the aviation pathologist - Practical problems.
p0347 A73-37739
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Skylab medical experiments altitude test /SMEAT/ chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992
Radiological assessment of the vertebral column from the point of view of aviation medicine
p0409 A73-43131

Aerospace biology research, including physical principles of gravitational biology, such as forces, weight and mass, weightlessness, and size and scale effects
[NASA-CR-128471] p0593 N73-10075
Prolonged weightlessness for 300 plus days and cardiac performance in primates
[NASA-CR-129512] p0063 N73-12075
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Research and development in Army aviation medical science and problems
[AD-749456] p0108 N73-15129
Physiological stresses and medical criteria for aircrew fatigue
p0111 N73-15152
Research and development related to space biology and medicine
[JPRS-58010] p0133 N73-16041
Applications of aerospace technology in biology and medicine
[NASA-CR-130544] p0142 N73-17047
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Occupational medicine procedures for personnel in lunar receiving laboratory for Apollo 11 crew members
p0143 N73-17049
Medical examinations and protection procedures for NASA employees working in radiologically controlled areas
p0143 N73-17050
Medical concepts and functional management in NASA Environmental Health Program
p0143 N73-17056
Environmental health measures to prevent cabin atmosphere toxicity and provide drinking water standards in manned space flight applications
p0144 N73-17058
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
Chorioretinal burn hazards of high intensity radiation sources in industry
p0145 N73-17071
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098
Prolonged weightlessness effects on physiological functions of dogs
[NASA-TT-F-14672] p0149 N73-17110
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093] p0173 N73-18104
Aerospace medicine for treating abnormal conditions caused by space flight
[NASA-TT-F-735] p0175 N73-18116
Review of papers presented at Conference on Space Biology and Aerospace Medicine
[JPRS-58345] p0176 N73-18125
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Effects of space flight noise intensities on human physiological functions
p0180 N73-19080
Feasibility determination for polyethylene packaging of drugs stocked in spacecraft pharmacies
p0218 N73-20114
Review of published bibliographical index of Soviet and foreign literature on biomedical problems in space
p0218 N73-20115
Medical biological and other problems of space flight
[JPRS-58678] p0224 N73-21089
Review of bibliography on medical and biological research during space flights
p0224 N73-21091
NASA contributions to patient monitoring
[NASA-CR-131538] p0230 N73-21138
Diagnostic physiological tests for selection and training of flying personnel
[NASA-TT-F-687] p0252 N73-21981
Physiological stress effects of space flight on human body
[JPRS-57139] p0254 N73-22002
Pathophysiological justifications for using drugs in aerospace medicine
[NASA-TT-F-736] p0257 N73-22033
Research activities in exobiology and aerospace medicine
[JPRS-59015] p0262 N73-23024
USSR conference on exobiology and aerospace medicine
p0264 N73-23045
Annotated bibliography and indexes on aerospace medicine and biology for 1961 to 1965
[NASA-TT-F-14662] p0265 N73-23053
Aerospace medicine research, including human tolerance to various stress factors - conferences
[AGARD-CP-110] p0265 N73-23057
NASA programs on life science research in aerospace environments, emphasizing cardiovascular system
p0265 N73-23058
Space biology, space medicine, and human physiology
[NASA-TT-F-14964] p0298 N73-25116
Aerospace biotechnology research projects
[AD-759277] p0300 N73-25135
Telemetry and investigative methods in space biology
[NASA-TT-F-14996] p0338 N73-27057
Aerospace medicine and exobiology research in support of long term manned space flight
[JPRS-59702] p0371 N73-29021
Application of aerospace medicine research in science and technology
[JPRS-59803] p0374 N73-29040
Bibliography of Russian literature on aviation and space medicine
[JPRS-53329] p0375 N73-29047
Aerospace Medical Research Laboratory handbook on medical monitoring and treatment of environmental stresses
[AD-760813] p0377 N73-29061
Soviet research on space biology, aerospace medicine, and human factors engineering
[JPRS-59952] p0415 N73-30983
Studies in hypoxia and phylogenetics by USSR aerospace medical scientist
[NASA-TT-F-15101] p0417 N73-30991
Medically related NASA technology applications and transfer activities
[NASA-CR-135527] p0418 N73-31001
Physiological stress effects of aerospace environment on human body and animals
[NASA-TT-F-15081] p0437 N73-32001
Aerospace psychology and physiology
[JPRS-60248] p0441 N73-33014
Aerospace medicine session concerning aviation and space physiology and psychology
p0445 N73-33037

AEROSPACE SCIENCES
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972.
p0395 A73-42158

AEROSPACE SYSTEMS
Computerized teleoperator applications in manned aerospace systems
p0270 N73-23904

AFCS (CONTROL SYSTEM)
U AUTOMATIC FLIGHT CONTROL

AFFERENT NERVOUS SYSTEMS
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system.
p0078 A73-16249

Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision
p0092 A73-18164
Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem
p0118 A73-19650
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
Useful future action models of instrumental reflexes and voluntary actions based on memory role in engram storage of received stimuli
p0194 A73-25199
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors
p0199 A73-26086
Characteristics of the higher nervous activity of monkeys during a postneurotic period
p0206 A73-27108
Intranuclear organization of the center median nucleus of the thalamus.
p0240 A73-29175
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
Anatomo-functional bases of cerebello-cerebral interrelations
p0282 A73-32287
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents
p0401 A73-42652
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits
p0403 A73-42681

AFFINITY
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620

AFTERIMAGES
Some differences among figural aftereffects, apparent motion, and paracontrast.
p0578 A73-10435
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894
Binaural interaction effects on afterperception of white noise pulse sequences delivered to both ears simultaneously or after various intervals
p0167 A73-24333
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196
Binocular rivalry and binocular fusion of after-images.
p0200 A73-26200
The dependence of the negative afterimage on the duration of the stimulus and the stimulus intensity
p0204 A73-26550
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
Monocular fixation tests and prediction model for time course of aftereffect of eye turn on autokinetic illusion direction
p0235 A73-28098
Properties of human visual orientation detectors - A new approach using patterned afterimages.
p0239 A73-29124
Stereoscopic depth aftereffects with random-dot patterns.
p0308 A73-34841
Temporal factors of movements in visual aftereffects
p0308 A73-34843
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Colored aftereffects after prelonged inspection of convex lines of one color and concave lines of another color
p0389 A73-41303
Stimulus specificity in the human visual system.
p0407 A73-42960

AGE FACTOR
Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license
p0582 A73-11238
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939
Spatial analysis in monkeys of various ages after extirpation of the parietal areas of the cerebral cortex
p0167 A73-24329
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
Age pecularities of whole-blood transketolase activity in healthy persons
p0276 A73-31164
Sonic booms and sleep - Affect change as a function of age.
p0324 A73-36780
The problem of early presbyopia in aircrew.
p0329 A73-36923
Visual problems among senior flight personnel.
p0329 A73-36924
Glaucoma development in aging flight personnel.
p0329 A73-36926
Binocular vision variation with age in flight crews
p0329 A73-36928

Reinforcement of unconscious traces of stimuli in the human being during ontogenesis p0343 A73-37251

Corti organ lesion effects on signal perception in patients with noise induced hearing loss, correlating speech discrimination with age and sound level p0352 A73-38182

Human intrapair twin differences, examining age, height, weight, heart volume, metabolism, respiratory rate and monozygous/dizygous differences p0361 A73-39792

Developments as regards maximum visual acuity with age among cockpit crew members. p0387 A73-41164

Torsional elasticity of human skin in vivo. p0391 A73-41625

Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease. p0408 A73-42975

Changes in electrocardiographs of Rhesus monkeys as function of age [NASA-TT-F-14675] p0136 N73-16062

Bioelectric activity changes in brains of sleeping children caused by aging factor p0257 N73-22032

AGGLUTINATION

Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound. p0155 A73-22534

AGING (BIOLOGY)

Ophthalmological assessment of visual functional impairment due to glare, stimulus motion and aging changes p0080 A73-16485

Photosensitized inhibitor formation in isolated, aging chloroplasts. p0122 A73-20453

Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods p0163 A73-23676

Physiological responses of rats to intermittent high-altitude stress - Effects of age. p0169 A73-24564

The significance of retinal pathology in ageing aircrew. p0329 A73-36925

Functional aging - Present status of assessments regarding airline pilot retirement. p0387 A73-41161

Age-dependent characteristics of myoglobin content and distribution in the heart and skeletal muscles p0429 A73-44669

Mathematical model for photosynthetic gas exchanges in growing wheat and radish biopaks of life support systems p0063 N73-12081

Age limits and flight fitness of civil aviation pilots p0254 N73-21999

Influence of personal characteristics on likelihood of decompression sickness [NASA-CR-135495] p0418 N73-31002

Effects of fatigue, age, and degree of difficulty on eye-hand coordination performance p0446 N73-33051

AGITATION

NT ULTRASONIC AGITATION

AGRICULTURE

Agroclimatology study of highlands of eastern Africa [WMO-339] p0446 N73-33045

AIR

NT ALVEOLAR AIR
NT COMPRESSED AIR
NT EXPIRED AIR

Acoustic measurement and recording system for noise generated by air bag automobile safety device [AD-761836] p0370 N73-27977

AIR CONDITIONING

Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport p0331 A73-36947

AIR COOLING

Dynamic katathermometer for measuring the cooling effect of an ambient medium p0280 A73-31512

AIR CUSHION VEHICLES

U GROUND EFFECT MACHINES

AIR FILTERS

Respirator cartridge filter efficiency under cyclic- and steady-flow conditions. p0383 A73-40408

Use of ultrafine fiber filter cloth for removing bacterial contaminants from air [NASA-TT-F-14940] p0293 N73-24123

AIR FLOW

Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing p0053 A73-14286

Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature p0053 A73-14288

'Closing volumes' and decreased maximum flow at low lung volumes in young subjects. p0158 A73-22929

Aspects of air flow to the olfactory region of the human nose p0276 A73-31163

Techniques for studying the aerodynamic characteristics of the bronchial tree of man p0322 A73-36576

Respiratory work minimization during exercise, using respiratory frequency, functional residual capacity and air flow pattern effects as controlled variables p0433 A73-45066

Numerical analysis of thermal resistance of air layers in air permeable clothing [NLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089

AIR INTAKES

NT ENGINE INLETS

AIR NAVIGATION

Pilot error analysis for airborne navigation procedures [AD-754214] p0223 N73-20150

AIR PIRACY

Psychological and medical viewpoint for hijacker handling, discussing air crew training program [AD-757130] p0589 A73-12564

AIR POLLUTION

Passive and active mode classification of air contamination sources in closed manned spaces, considering mechanical, electrical, chemical, physical and human factors p0193 A73-25037

Application of remote sensing techniques to public health [NASA-CR-129822] p0099 N73-14069

Effects of SO2 decay product toxicity on human physiological functions p0099 N73-14071

Respiratory models for studying hazards of air pollution [UR-3490-169] p0107 N73-15121

Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants [AD-751438] p0139 N73-16084

Public health exposure limits for air pollutants [AD-751437] p0140 N73-16088

Design and performance of exhaust hood with protective air current outside of hood surface p0144 N73-17063

Hypoxia adaptation of rats for increased resistance to toxic atmospheric gases p0183 N73-19100

Toxic effect of indole inhalation on man, mouse, rat, and rabbit organisms p0183 N73-19102

Toxic effects of human exhaled air on mice organisms p0183 N73-19103

Oxidation of atmospheric impurities in space cabin and purity of reclamated water p0183 N73-19104

Man induced changes in earth climate by environment pollution and heat production [PB-213676/2] p0267 N73-23074

AIR PURIFICATION
Hydrogen peroxide aerosols for decontamination of influenza atmosphere
[NASA-TT-F-15127] p0438 N73-32006
Cost data for modified hydrogen depolarized carbon dioxide concentrator in life support system
[NASA-CR-124462] p0447 N73-33052
AIR SICKNESS
U MOTION SICKNESS
AIR TRAFFIC CONTROL
Human factors evaluation of labelled radar displays. p0049 A73-14155
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers. p0055 A73-14308
The employment of a spoken language computer applied to an air traffic control task. p0083 A73-16728
Proposed new test for aptitude screening of air traffic controller applicants. p0155 A73-22535
Differential velocity effects on converging target intersection time estimation accuracy, considering plane conditions and air traffic controller experience p0285 A73-32900
Air traffic controller responsibilities and performance evaluation criteria development, discussing manager/monitor functions, field evaluation tests and training criteria p0353 A73-38472
Comparison of the job attitudes of personnel in three air traffic control specialties. p0355 A73-39108
Continuous radio telemetric recording of pulse rate in radar controllers while on duty p0356 A73-39208
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior. p0387 A73-41158
Design of computerized airborne traffic display device with alphanumerical control for aircraft pilots p0598 N73-10112
Runway separation standards according to reaction time of pilot manual control response to air traffic controller communication p0598 N73-10113
Comparison of age, education, pre-FAA experience, aptitudes, training course performance, and post-Academy attrition rates of male and female trainees
[FAA-AM-72-22] p0611 N73-11094
Self-estimates of distractibility as related to performance decrement on task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
Design, development, and evaluation of airport lighting control panel for airport traffic control towers
[FAA-RD-72-93] p0066 N73-12108
Effectiveness of training device for air traffic communication and carrier landing control
[AD-751556] p0141 N73-16101
Attrition-retention rates of air traffic control trainees recruited during 1960 to 1963 and 1968 to 1970
[FAA-AM-72-33] p0222 N73-20140
Analysis of air traffic controller responses under stress conditions to show effects of accuracy, quality, and comprehensiveness of available data p0269 N73-23714
Job attitudes of air traffic controllers
[FAA-AM-73-2] p0339 N73-27066
AIR TRANSPORTATION
Air-transport, a main cause of smallpox epidemics today. p0326 A73-36791
Analysis of research activities conducted to determine criteria for passenger comfort in various methods of transportation p0591 N73-10024
Analysis of passenger acceptance of commercial low-density short haul, air transportation
[NASA-CR-132285] p0367 N73-27950
Resynchronization of circadian rhythms following transmeridian flight observed in two groups of students p0368 N73-27958
Effects of two sequential transatlantic flights on circadian rhythm of body function and performance p0369 N73-27964
AIRCRAFT
Human operator model performance in tracking high performance aircraft
[AD-746725] p0072 N73-13101
AIRCRAFT ACCIDENT INVESTIGATION
Identifying pilot error potential in the F-4 aircraft. p0083 A73-16731
Protective helmets performance evaluation for design optimization, considering failure analysis from aircraft accident reports p0284 A73-32655
Pilot error evaluation in aircraft accidents, discussing human failure factors and flight and cockpit voice recorder evidence p0307 A73-34748
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army p0329 A73-36929
Annex 13 and the work of the aviation pathologist - Practical problems. p0347 A73-37739
Barotrauma in United States Air Force accidents/incidents. p0387 A73-41160
AIRCRAFT ACCIDENTS
Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license p0582 A73-11238
Personal life changes and health stresses in contrast to accident proneness as factors in pilot error p0083 A73-16732
Ventilated wet suit for naval aircrews protection against water exposure in aircraft accidents, describing neoprene foam and nylon liner construction with air ventilation p0285 A73-32672
The effects of fatigue on health and flight safety. p0303 A73-34080
Aircraft crash injury reduction through seat and restraint design, discussing dummy size considerations, seat belts, aircraft acceleration and injury types
[SAE PAPER 730290] p0306 A73-34655
Hepatic lesions observed among flight crews following aviation accidents p0330 A73-36933
Severe intraabdominal injuries without abdominal protective rigidity after an air crash - Seat belt injury p0356 A73-39209
Statistical analysis of impact injuries to seated human responding to square wave energy absorption of vertical deceleration pulse representing helicopter crash
[AD-745919] p0612 N73-11102
Position reporting and communications systems of aviation and marine rescue operations
[AD-761756] p0369 N73-27967
AIRCRAFT ANTENNAS
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen
[AHS PREPRINT 720] p0309 A73-35061
AIRCRAFT APPROACH INSTRUMENTS
U APPROACH INDICATORS
AIRCRAFT BREATHING APPARATUS
U BREATHING APPARATUS
AIRCRAFT CABINS
U AIRCRAFT COMPARTMENTS
AIRCRAFT CARRIERS
Development and characteristics of six degree of freedom, fast time predictor model for simulation of F-4 aircraft landing on aircraft carrier
[AD-750294] p0103 N73-14102
Prototype model for aircraft carrier landing officer
[AD-762728] p0377 N73-29064
AIRCRAFT COMPARTMENTS
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.

p0155 A73-22537
Commercial aircraft passenger cabins interior design, considering seating arrangements, cabin architecture and fittings, materials and color schemes and maintainability
p0163 A73-23687
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers
p0248 A73-30519
High altitude aircraft cabin pressurization for crews and passengers, discussing altitude tolerance, reaction times, decompression and oxygen equipment
p0251 A73-30937
Acute toxicity of brief exposures to HF, HCl, NO2, and HCN singly and in combination with CO in aircraft cabins
[AD-751442] p0139 N73-16085

AIRCRAFT CONTROL
NT HELICOPTER CONTROL
The problem of human efficiency in automated control systems
p0079 A73-16410
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft
p0282 A73-32044
Some characteristics of pilot's performance under complicated flight conditions.
p0328 A73-36921
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110

AIRCRAFT DESIGN
Commercial aircraft passenger cabins interior design, considering seating arrangements, cabin architecture and fittings, materials and color schemes and maintainability
p0163 A73-23687
General aviation pilot operational profile study, discussing implications for airman certification standards, flight safety regulations and aircraft design
[SAE PAPER 730334] p0307 A73-34687

AIRCRAFT EQUIPMENT
Restraint systems /lap belts and shoulder harnesses/ for military, transport and general aviation aircraft, with emphasis on pilot and crew systems
[SAE PAPER 730291] p0306 A73-34656
Human factors in design of avionics subsystems considering training costs and performance of Air Force personnel
[AD-759583] p0337 N73-26096

AIRCRAFT EXHAUST
U EXHAUST GASES

AIRCRAFT HAZARDS
Radiation problems of supersonic flight - The operators' viewpoint.
p0080 A73-16624
Pilot incapacitation as cause for aircraft operational risks, discussing flight crews education for emergency situations handling
p0170 A73-24717
Migration corridors for ducks and geese and effects on aviation safety
[AD-748114] p0073 N73-13109
Wind tunnel tests to determine structural integrity of birds under conditions simulating ingestion of birds into inlets of high speed aircraft
[NASA-TM-X-68163] p0106 N73-15114

AIRCRAFT INDUSTRY
Russian book - safety measures in aviation industry.
p0312 A73-35869

AIRCRAFT INSTRUMENTS
NT ALTIMETERS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT FLIGHT RECORDERS
NT POSITION INDICATORS
NT RADIO DIRECTION FINDERS
NT TACHOMETERS
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload
[DGLR PAPER 72-097] p0584 A73-11666
Human factors aspects in aircraft electronic display systems, discussing cathode ray tubes /CRT/ and light emitting diodes /LED/ applications and characteristics
p0204 A73-26500
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133

AIRCRAFT LANDING
NT CRASH LANDING
NT DITCHING (LANDING)
Perceptual considerations for a wide field of view, helicopter night landing system /HENILAS/.
p0081 A73-16705
Aircrew workload during the approach and landing.
p0351 A73-38005
Improved pilot performance using simulated pictorial landing display with symbols
p0599 N73-10122
Development and characteristics of six degree of freedom, fast time predictor model for simulation of F-4 aircraft landing on aircraft carrier
[AD-750294] p0103 N73-14102
Effectiveness of training device for air traffic communication and carrier landing control
[AD-751556] p0141 N73-16101
Prototype model for aircraft carrier landing officer
[AD-762728] p0377 N73-29064

AIRCRAFT MAINTENANCE
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857
Technical and safety aspects of maintenance work on commercial aircraft wing fuel tanks, considering wing deformation effects and sealant materials and reapplications
p0329 A73-36932
Safe flying, skilled personnel and aircraft maintenance assurance via safety equipment, initial and recurrent training, protective clothing and shelter from inclement weather, maintenance scheduling, etc
p0357 A73-39212
Fire hazard reduction in corporate aircraft oxygen system, covering hoses, regulators, manifolds, cylinders, leakage, combustion conditions and servicing procedures
p0357 A73-39215
Performance tests to determine proficiency of maintenance personnel in servicing fuel start solenoid in OH-1 helicopter
[AD-745163] p0605 N73-10166
Manpower requirements for aircraft maintenance operations of USAF
[AD-760082] p0337 N73-26097

AIRCRAFT NOISE
NT JET AIRCRAFT NOISE
NT SONIC BOOMS
The second noise and social survey around Heathrow, London airport.
p0041 A73-12980
Book - Human factor aspects of aircraft noise.
p0206 A73-27450
Methods for quantifying the effect of noise on people.
p0392 A73-41707
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure.
p0425 A73-43500
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101
Effects of light aircraft noise on hearing
[NASA-CR-130987] p0173 N73-18095
Unique field-laboratory methodology for assessing human response to noise
[NASA-CR-2221] p0176 N73-18124
Influence of cockpit noise on hearing in flight crew personnel
[FAA-AM-72-32] p0185 N73-19125
Electroencephalographic and behavioral responses of humans to aircraft noise during sleep

[NASA-CR-2279] p0338 N73-27058
Middle ear muscle reflex thresholds to various aircraft noises
[AD-764739] p0446 N73-33048
AIRCRAFT PILOTS
NT TEST PILOTS
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151
Telemetry of cardiovasculary parameters on fighter aircraft flying pilots. p0055 A73-14309
General aviation pilot operational profile study, discussing implications for airman certification standards, flight safety regulations and aircraft design
[SAE PAPER 730334] p0307 A73-34687
Lone woman pilot sleep patterns and sleep disruptions on global flight across time zones p0307 A73-34745
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth p0307 A73-34746
Military aircraft pilot in-flight consciousness loss etiologies, discussing rapid decompression, hyporia, dysbarism, seizure, improper maneuver, vasovagal syncope, acceleration sensitivity, etc p0307 A73-34747
Further sleep problems in airline pilots on world-wide schedules. p0326 A73-36792
Sudden incapacitation in flight. p0326 A73-36847
Surveillance of the vertebral column in pilots who have undergone an ejection p0328 A73-36914
The problem of early presbyopia in aircrew. p0329 A73-36923
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes. p0330 A73-36934
Technique for extemporaneously obtaining an electroencephalogram p0330 A73-36937
Aircrew workload during the approach and landing. p0351 A73-38005
Patterns of diurnal variation in the intraocular pressure of airline pilots. p0355 A73-39107
Aircraft pilot spatial disorientation and illusory perceptual break-off sensations during flight associated with minor vestibular asymmetry p0356 A73-39111
Statistical analysis of air combat situation evaluations conducted by US Navy pilots to detect differences caused by experience
[AD-747519] p0068 N73-12119
Changes in circadian rhythm of aircraft pilot oral body temperature as result of transmeridian flights
[DLR-FB-73-01] p0178 N73-18140
Methods for determining blood alcohol levels in pilots p0229 N73-21124
Impact resistance of crash helmets for agricultural aviation pilots
[ARL/SM-NOTE-390] p0420 N73-31014
AIRCRAFT SAFETY
Psychological and medical viewpoint for hijacker handling, discussing air crew training program
[AD-757130] p0589 A73-12564
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658
Restraint systems /lap belts and shoulder harnesses/ for military, transport and general aviation aircraft, with emphasis on pilot and crew systems
[SAE PAPER 730291] p0306 A73-34656
Objectives of training in relation to accident prevention. p0326 A73-36850
Annex 13 and the work of the aviation pathologist - Practical problems. p0347 A73-37739
AIRCRAFT STABILITY
NT HOVERING STABILITY
AIRCREWS
U FLIGHT CREWS
AIRFOILS
NT FIXED WINGS
NT WINGS
AIRGLOW
NT TWILIGHT GLOW
AIRLINE OPERATIONS
Radiation problems of supersonic flight - The operators' viewpoint. p0080 A73-16624
Civil aviation medicine in the coming decade. p0117 A73-19484
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines. p0329 A73-36922
Management of cataract in commercial flight personnel. p0329 A73-36927
Functional aging - Present status of assessments regarding airline pilot retirement. p0387 A73-41161
Development of mathematical model to analyze traveler acceptance factors in short haul air carrier operations p0591 N73-10023
AIRLINERS
U COMMERCIAL AIRCRAFT
U PASSENGER AIRCRAFT
AIRPORT TOWERS
Design, development, and evaluation of airport lighting control panel for airport traffic control towers
[PAA-RD-72-93] p0066 N73-12108
AIRSPEED
Parachutist biomedical effects during 110-175 knot towing by aircraft, establishing maximum feasible airspeed p0285 A73-32675
Human physiological responses to high speed aerial tow. p0330 A73-36939
Pilot visual threshold and perception for aircraft movement estimation during unaided visual approach control p0600 N73-10125
ALARMS
U WARNING SYSTEMS
ALBEDO
Illuminance and albedo variations /whiteness constancy/ category judgments for stimuli with unpatterned and patterned surfaces p0388 A73-41183
ALBUMINS
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits. p0054 A73-14301
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization p0170 A73-24685
Effects of oxygen-augmented atmosphere on the immune response. p0307 A73-34743
ALCOHOLS
NT ETHYL ALCOHOL
NT POLYVINYL ALCOHOL
Conference on detection, evaluation, and identification of drugs and alcohol in flying personnel and effects on flight fitness
[AGARD-CP-108] p0226 N73-21102
Pilot performance and sleep patterns in long duration flights and control of hypnotic drug and alcohol use p0226 N73-21107
Alcohol reference method for predicting drug modifications of central nervous system activity and pilot performance decrease p0227 N73-21112
Alcohol induced performance degradation in pilot instrument approach landings p0227 N73-21113
Methods for determining blood alcohol levels in pilots

p0229 N73-21124
Comparison of alcohol and diazepam effects on human mental and psychomotor functions
p0229 N73-21126
ALDEHYDES
NT FORMALDEHYDE
ALDOSTERONE
Renal component of the antigravitation function of the organism
p0123 A73-20976
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators
p0174 N73-18111
Chromatographic determination of aldosterone level in urine
[RAE-LIB-TRANS-1682] p0333 N73-26061
ALERTNESS
Effects of noise and response complexity upon vigilance performance.
p0086 A73-17523
German monograph - Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram.
p0122 A73-20391
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Reinforcement effects on human attention and performance in continuous response to visual stimuli
[AD-747798] p0072 N73-13103
Effects of human alertness on vestibular nystagmus habituation
[AD-749352] p0103 N73-14108
Temperature and noise irradiation effects on human energetic metabolism during vigilance task
p0189 N73-19155
Stimulating and tranquilizing drug effects on human performance indices
p0256 N73-22021
ALGAE
NT BLUE GREEN ALGAE
NT CHLORELLA
Variable photosynthetic units, energy transfer and light-induced evolution of hydrogen in algae and bacteria.
p0130 A73-21685
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae.
p0287 A73-33226
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
Light beam attenuation in suspensions of algae
p0378 N73-29325
Light and carbon dioxide effects on algal life support systems in space flight
[NASA-CR-135796] p0445 N73-33039
ALGAL BLOOM
U ALGAE
ALGEBRA
NT EIGENVECTORS
NT GROUP THEORY
NT POLYNOMIALS
ALGORITHMS
Nonlinear method of analyzing electroencephalograms
p0580 A73-10661
Algorithm for spectrum decomposition during continuous man-computer interaction, noting Gaussian distribution of spectral bands and linear approximation for background
p0159 A73-22971
Automation of computer controlled robot manipulators
[JPRS-59717] p0375 N73-29051
Algorithms involved in visual shape perception
p0446 N73-33050
Algorithm of simple inductive interaction between man and surrounding objects and events
p0447 N73-33058
ALIPHATIC COMPOUNDS
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT ALKYL COMPOUNDS
NT CARBON TETRAFLUORIDE
NT CELLULOSE
NT CHOLINE
NT DEXTRANS
NT ETHYL ALCOHOL
NT ETHYLENE
NT GLUCOSE
NT GLUCOSIDES
NT GLUTAMATES
NT GLUTAMIC ACID
NT GLYCEROLS
NT GLYCOGENS
NT HEXOKINASE
NT HYDRAZINES
NT KETONES
NT LACTATES
NT LACTIC ACID
NT METHANE
NT METHYL COMPOUNDS
NT METHYLHYDRAZINE
NT MONOSACCHARIDES
NT NUCLEASE
NT NUCLEOSIDES
NT PENTANONE
NT PROPYL COMPOUNDS
NT RIBOSE
NT STARCHES
NT SUCROSE
NT THIOLS
ALKALI HALIDES
NT SODIUM CHLORIDES
ALKALI METALS
NT LITHIUM
NT POTASSIUM
NT POTASSIUM ISOTOPES
NT RUBIDIUM
NT SODIUM
NT SODIUM 24
ALKALINE EARTH OXIDES
NT BERYLLIUM OXIDES
ALKALOIDS
NT ATROPINE
NT HYOSCINE
ALKANES
NT METHANE
ALKENES
NT ETHYLENE
ALKYL COMPOUNDS
Protective effects of pyridinium salts against alkyl phosphate poisoning including influence of chemical and aging
[BMVG-FBWT-72-8] p0137 N73-16072
Pharmacological data for aminothiol and indolylalkylamine radioprotectors
p0212 N73-20066
ALLOCATIONS
NT RESOURCE ALLOCATION
ALLOYS
NT BERYLLIUM ALLOYS
ALPHANUMERIC CHARACTERS
The effect of illumination level, stroke width and figure ground on legibility of HANEL numbers.
p0083 A73-16729
Eye movements during visual search and memory search.
p0239 A73-29125
ALTERNATIVES
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893
ALTIMETERS
Analysis of pilot performance in evaluating three types of aircraft altimeters during C-135B simulator flight

[ASD-TR-72-63] p0074 N73-13117
ALTITUDE
NT FLIGHT ALTITUDE
NT HIGH ALTITUDE
NT LOW ALTITUDE
NT SIMULATED ALTITUDE
Influence of altitude and drugs on cerebral circulation in smokers and non-smokers p0229 N73-21125
ALTITUDE ACCLIMATIZATION
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia p0575 A73-10153
Arterial oxygen increase by high-carbohydrate diet at altitude. p0576 A73-10164
Russian papers on human adaptability covering altitude and temperature acclimatization, work capacity and anthropogenetic and medicogenetic factors p0584 A73-11921
High altitude adaptation in mountain inhabitants of Tian Shan and Pamir, discussing effects on hemodynamic and pulmonary functions p0584 A73-11922
Hemocoagulation system function in mountain inhabitants and during altitude acclimatization, noting parasympathetic nervous system tonus p0584 A73-11923
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads p0584 A73-11924
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir p0584 A73-11925
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man. p0589 A73-12562
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia. p0042 A73-13499
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude. p0042 A73-13500
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents. p0059 A73-15523
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis. p0115 A73-19151
Mountain inhabitants physiological characteristics due to altitude effects, investigating human tolerance and adaptation to ambient environment p0116 A73-19212
High altitude acclimatization and mountain climbing effects on human organism, considering oculomotor, cardiovascular and respiratory responses and endurance p0124 A73-20991
Influence of developmental adaptation on aerobic capacity at high altitude. p0158 A73-22928
Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy p0168 A73-24514
Physiological responses of rats to intermittent high-altitude stress - Effects of age. p0169 A73-24564
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives. p0196 A73-25333
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs. p0200 A73-26122
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits. p0201 A73-26220
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation p0208 A73-27713
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber. p0251 A73-30910
Energy balance during moderate exercise at altitude. p0277 A73-31343
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia p0279 A73-31511
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses p0305 A73-34232
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia p0345 A73-37396
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/. p0358 A73-39602
Relationship between organ weight and blood flow in rats adapted to simulated high altitude. p0387 A73-41156
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain p0389 A73-41278
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation p0428 A73-44549
Regression of altitude-produced cardiac hypertrophy. p0433 A73-45065
Physiological effects of high mountain alpinism exercises on human body p0135 N73-16058
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature
[NASA-TT-F-14861] p0219 N73-20123
Hemoglobin and erythrocyte increase in rat adaptation to hypoxic hypoxia p0255 N73-22005
Altitude acclimatization period effects on rat resistance to hypoxia p0255 N73-22006
Cardiopulmonary adaptations of man to moderately high altitude
[AD-755192] p0267 N73-23075
ALTITUDE SICKNESS
Medical considerations for aircraft passengers. p0047 A73-13802
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen. p0238 A73-28511
Effect of certain flight factors on crew efficiency p0383 A73-40350
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes. p0400 A73-42420
Review of decompression and altitude sickness noting effects at safe depths/altitudes
[DRIC-TRANS-3035] p0259 N73-22041
ALTITUDE SIMULATION
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular p0157 A73-22926
Estimation of hypoxia tolerance in a decompression chamber p0331 A73-36945
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Skylab medical experiments altitude test /SMEAT/ chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuse p0409 A73-431

Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062
Gastrointestinal proprioceptor effects on high altitude rabbit ocular reflexes
p0253 N73-21984

ALTITUDE TESTS
NT HIGH ALTITUDE TESTS
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985

ALTITUDE TOLERANCE
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
High altitude aircraft cabin pressurization for crews and passengers, discussing altitude tolerance, reaction times, decompression and oxygen equipment
p0251 A73-30937
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests
p0327 A73-36904
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
Nutrient protein intake of rats and tolerance to acute hypoxia
p0263 N73-23035

ALUMINUM
Biological and toxicity effects of aluminum and other chemicals in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136

ALVEOLAR AIR
Indexes of ventilation distribution before/after airway occlusion in dogs, indicating collateral channel inspired gas distribution reduction
p0048 A73-14113
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
Temperature of exhaled air of healthy subjects
p0323 A73-36583
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Molecular diffusion model of cardiogenic gas mixing during inspiration at alveolar boundary in dogs
p0323 A73-36652
Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence
p0343 A73-37197
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2.
p0359 A73-39777
Gas transport in the human lung.
p0400 A73-42421
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069

ALVEOLI
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134
Cat and rat lung damage due to hyperbaric oxygen exposure and head injury, discussing alveolar surfactants, sympathetic stimulation and monkey injuries
[AD-759298] p0238 A73-28507
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064

AMBIENT TEMPERATURE
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512
Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994
Circadian rhythms of sleep and cerebral temperature in rats chronically exposed to hot environments
[NASA-TT-F-15082] p0417 N73-30994

AMBIGUITY
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892

AMIDES
NT ACETANILIDE
NT THIURONIUM
NT UREAS

AMINES
NT CATECHOLAMINE
NT CYSTEAMINE
NT HYOSCINE
NT SEROTONIN
NT THIURONIUM
NT TRYPTAMINES
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864
Organic and species-related differences in the action of certain hydrazine derivatives and of aminoperhydroacridine on the oxidative deamination of serotonin
p0163 A73-23679
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
Effectiveness of pharmacochemical protective substances on irradiated mice as neutron component increases
[DRIC-TRANS-2961] p0108 N73-15124
Pharmacological data for aminothiol and indolylalkylamine radioprotectors
p0212 N73-20066
Aminothiol radioprotector, finam, effect on irradiated animal tissues under various conditions
p0215 N73-20085
Systems design for amine carbon dioxide sorber bed to be used in manned spacecraft
[NASA-CR-111849] p0420 N73-31018

AMINO ACIDS
NT GLUTAMIC ACID
NT LEUCINE
NT LYSINE
NT METHIONINE
NT PEPTIDES

NT PYRIDINE NUCLEOTIDES
NT PYRUVATES
NT THYROXINE
NT TRYPTOPHAN
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Space environment effects on human life and biochemical evolution study in aerospace medicine and biology, noting amino acid molecules synthesis
p0056 A73-14589
Biogeochemistry of aragonite mud and oolites.
p0056 A73-14662
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
Hydrolysis of aqueous extract of lunar dust samples for identification and quantitation of amino acid precursors in extraterrestrial sources, considering prebiotic evolutionary pathways termination
p0095 A73-18421
Chemical evolution - Recent syntheses of bioorganic molecules.
p0202 A73-26477
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels
p0383 A73-40372
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons.
p0424 A73-43338
Extraction and analysis by gas-liquid chromatography of catecholamine metabolites from biological tissue
[AD-745944] p0066 N73-12105
Resistance of mice to acceleration overloads after injection of aminothiol group radioprotector
p0211 N73-20056
GAST and GALT aminotransferases activity of dog blood serum following total exposure to gamma rays with stomach or head shielded
p0213 N73-20075
Free amino acid excretion in urine as test for early diagnosis of radiation damage in humans
p0215 N73-20092
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128

AMMONIA
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
Influence of 100 percent anhydrous ammonia environment on body functions
p0147 N73-17088
Hyperoxic atmosphere effect on rat metabolism and elimination of gaseous wastes
p0254 N73-22004
Ammonifying ability of denitrifying bacteria of species pseudomonas fluorescens
[NASA-TT-F-15086] p0412 N73-30068

AMMONIUM COMPOUNDS
Hyperammonemia development in metabolic toxicity of hydrazine
[AD-749519] p0100 N73-14077

AMPHIBIA
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454

AMPLIFICATION
Positioning accuracy with binary selective and fixed gain manual control systems, using finger stick control for operator performance tests
p0284 A73-32583

AMPLIFICATION FACTOR
U AMPLIFICATION

AMPLIFIER DESIGN
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity
p0166 A73-23849
A universal preamplifier for bioelectric signals
p0383 A73-40345
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits
p0403 A73-42681
Two channel transistor amplifier design with negative capacitance correction for microelectrode applications
p0430 A73-44723

AMPLIFIERS
NT DIFFERENTIAL AMPLIFIERS
NT PREAMPLIFIERS
NT TRANSISTOR AMPLIFIERS

AMPLITUDE DISTRIBUTION ANALYSIS
Non-Gaussian properties of the EEG during sleep.
p0126 A73-21465
Amplitude discriminator with variable effective range design for use with/without digital computer in neuron pulsed activity analysis
p0168 A73-24516

AMPLITUDE MODULATION
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248

AMPLITUDE PROBABILITY ANALYSIS
U AMPLITUDE DISTRIBUTION ANALYSIS

AMPLITUDES
NT PULSE AMPLITUDE

ANAEROBES
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490

ANALOG COMPUTERS
A simple cardiac contractility computer.
p0403 A73-42677

ANALOG SIMULATION
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Determination of performance precision and informativeness of electronic models of the sensory system of man
p0432 A73-44911
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Mathematical simulation study of neuron response to vestibular analyzer exposed to periodically varying acceleration
[NASA-TT-F-15130] p0420 N73-31015

ANALOG TO DIGITAL CONVERTERS
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
Feasibility of limb controlled astronaut maneuvering scheme
p0339 N73-27063

ANALOGIES
Investigation of the distribution of synaptic

inputs on an analog model of the motoneurons
p0349 A73-37942
ANALYSIS (MATHEMATICS)
NT ANALYTIC FUNCTIONS
NT COMBINATORIAL ANALYSIS
NT FOURIER ANALYSIS
NT FOURIER SERIES
NT FOURIER TRANSFORMATION
NT FUNCTIONAL ANALYSIS
NT HARMONIC ANALYSIS
NT LIAPUNOV FUNCTIONS
NT MEASURE AND INTEGRATION
NT NUMERICAL ANALYSIS
NT VECTOR ANALYSIS
ANALYSIS OF VARIANCE
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception
p0121 A73-20262
Prediction equation validity for response surface methodology analysis of surveillance tracking by human operators, comparing variance and regression procedures
p0431 A73-44776
ANALYTIC FUNCTIONS
On the approximation of the optical modulation transfer function /MTF/ by analytical functions.
p0121 A73-20264
ANALYZERS
Neuron analyzer technique for poststimulus histogram plotting of neuron excitation as function of stimulus onset time
p0165 A73-23811
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812
Use of skin analyzer as communication channel in controlling activity
p0069 N73-13074
ANATOMY
NT ADRENAL GLAND
NT AORTA
NT ARM (ANATOMY)
NT ARTERIES
NT BARORECEPTORS
NT BLOOD VESSELS
NT BONES
NT BRAIN
NT BRAIN STEM
NT BRONCHI
NT CAPILLARIES (ANATOMY)
NT CARDIAC AURICLES
NT CARDIAC VENTRICLES
NT CARDIOVASCULAR SYSTEM
NT CEREBELLUM
NT CEREBRAL CORTEX
NT CEREBRUM
NT CHEMORECEPTORS
NT CIRCULATORY SYSTEM
NT COCHLEA
NT COLLAGENS
NT CONNECTIVE TISSUE
NT CORNEA
NT CORTI ORGAN
NT CRANIUM
NT DIAPHRAGM (ANATOMY)
NT DIASTOLE
NT EAR
NT EARDRUMS
NT ELBOW (ANATOMY)
NT EOSINOPHILS
NT ERYTHROCYTES
NT ESOPHAGUS
NT EYE (ANATOMY)
NT FINGERS
NT FLEXORS
NT FOREARM
NT FOVEA
NT GENITOURINARY SYSTEM
NT GLANDS (ANATOMY)
NT GLOMERULUS
NT GONADS
NT GRAVIRECEPTORS
NT HAND (ANATOMY)
NT HEAD (ANATOMY)
NT HEART
NT HEMATOPOIESIS
NT HEMATOPOIETIC SYSTEM
NT HIPPOCAMPUS
NT HUMAN BODY
NT INTRACRANIAL CAVITY
NT JOINTS (ANATOMY)
NT KIDNEYS
NT KNEE (ANATOMY)
NT LABYRINTH
NT LEG (ANATOMY)
NT LIMBS (ANATOMY)
NT LIVER
NT LUNGS
NT LYMPHOCYTES
NT MARROW
NT MECHANORECEPTORS
NT MIDDLE EAR
NT MUSCULOSKELETAL SYSTEM
NT MYOCARDIUM
NT NECK (ANATOMY)
NT NOSE (ANATOMY)
NT OCULOMOTOR NERVES
NT ORGANS
NT OTOLITH ORGANS
NT PANCREAS
NT PELVIS
NT PHOTORECEPTORS
NT PINEAL GLAND
NT PITUITARY GLAND
NT PUPILS
NT RESPIRATORY SYSTEM
NT RETICULOCYTES
NT RETINA
NT SEMICIRCULAR CANALS
NT SENSE ORGANS
NT SKULL
NT SPLEEN
NT STOMACH
NT SYSTOLE
NT TESTES
NT THERMORECEPTORS
NT THYROID GLAND
NT TORSO
NT ULNA
NT VASCULAR SYSTEM
NT VEINS
NT VERTEBRAE
NT VERTEBRAL COLUMN
NT VESTIBULES
Book - How man moves: Kinesiological studies and methods.
p0048 A73-13993
Handbook on structural evolution of vestibular apparatus
p0264 N73-23044
Computerized simulation of anatomically correct geometrical model of human body
[NASA-CR-134043] p0440 N73-32022
ANEMIAS
Industrial health hazard in chronic exposure to monomethylhydrazine and dose related hemolytic anemia in humans
[AD-751440] p0139 N73-16087
ANEMOMETERS
NT HOT-FILM ANEMOMETERS
ANEMOMETRY
U VELOCITY MEASUREMENT
ANESTHESIA
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
Respiratory impedance effects on electrical activities of bulbar respiratory neurons, respiratory muscles, and pulmonary ventilation in anesthesized cats
p0064 N73-12084
ANGINA PECTORIS
Pathology of angina pectoris.
p0085 A73-17276
Clinical diagnosis of angina pectoris, implicating obstructive disease of coronary arteries and effects of paroxysmal events on heart rate and blood pressure
p0085 A73-17277
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279
Long-term observations in patients with angina and normal coronary arteriograms.

p0097 A73-18871
Problems in the recognition of angina pectoris.
p0321 A73-36541
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836
ANGIOGRAPHY
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
Left ventricular end-diastolic pressures following selective coronary arteriography.
p0583 A73-11508
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
Long-term observations in patients with angina and normal coronary arteriograms.
p0097 A73-18871
Pattern of blood flow within the heart - A stable system.
p0125 A73-21214
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804
Estimation of left ventricular size by echocardiography.
p0159 A73-22999
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038
Video instrumentation for radionuclide angiocardiography.
p0348 A73-37796
Use of a video system in the study of ventricular function in man.
p0348 A73-37797
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342
The complications of coronary arteriography.
p0399 A73-42343
Indications and value of coronary arteriography.
p0405 A73-42830
The value of different angiographic procedures in coronary heart disease.
p0405 A73-42831
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400
ANGLE OF ATTACK
Evaluation of standardized angle of attack flight training system
[AD-757243] p0269 N73-23090
ANGLES (GEOMETRY)
NT ANGLE OF ATTACK
NT DIHEDRAL ANGLE
ANGULAR ACCELERATION
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation.
p0058 A73-15218
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals
p0209 A73-27718
Experimental-mathematical analysis of the effects of rotational accelerations on the vestibular apparatus
p0303 A73-34120
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Neurophysiology and dynamic response of vestibular system to angular and linear acceleration
[DR-215] p0606 N73-11057
Physiological response of cat semicircular canal dependent units to linear acceleration without angular acceleration
[AMRU-R-70-4] p0607 N73-11061
Human performance, physiological effects, and pathological effects of rotary acceleration
p0105 N73-15096
Determination of angular acceleration equivalent to effect of coriolis acceleration on receptors of semicircular canals
p0218 N73-20112
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
ANGULAR CORRELATION
The study of biological macromolecules using perturbed angular correlations of gamma radiation.

p0589 A73-12648
ANGULAR MOTION
U ANGULAR VELOCITY
ANGULAR VELOCITY
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception
p0061 A73-15796
Semicircular canal model with flow visualization chamber for dynamic recording of canal fluid response to angular velocity effects
p0111 N73-15153
ANHYDRIDES
NT PEROXIDES
ANIMALS
NT AMPHIBIA
NT ARTEMIA
NT ARTHROPODS
NT BATS
NT BEES
NT BIRDS
NT CALVES
NT CATS
NT CHIMPANZEES
NT CRABS
NT DOGS
NT DROSOPHILA
NT FISHES
NT FROGS
NT GUINEA PIGS
NT HAMSTERS
NT HOMEOTHERMS
NT HUMAN BEINGS
NT INSECTS
NT INVERTEBRATES
NT LARVAE
NT MAMMALS
NT MICE
NT MONKEYS
NT POIKILOTHERMIA
NT PRIMATES
NT RABBITS
NT RATS
NT SEALS (ANIMALS)
NT SPORES
NT SWINE
NT TRIBOLIA
NT VERTEBRATES
NT WILDLIFE
NT WORMS
Thermoregulation evolution in various animals, discussing body size and composition effects, body temperature variations, control mechanisms, heat loss and production, behavior and ontogeny
p0406 A73-42863
Abstracts on microwave radiation effects on human and animal physiological functions and life expectancy
[NBL-1972-6] p0591 N73-10061
Toxic effects of continuous exposure to dichloromethane vapor on dogs, monkeys, rats, and mice
[AD-746295] p0611 N73-11088
Bibliography of wildlife movements and tracking systems
[NASA-CR-130380] p0133 N73-16040
Animal species susceptibility to toxic effects of long term exposure to environmental monomethylhydrazine
[AD-751441] p0139 N73-16086
Toxicity of long term methyl isobutyl ketone exposure in dogs, monkeys, mice, and rats
[NASA-TM-X-69100] p0177 N73-18130
Hyperoxic damage in animal cells, tissues, and organs
p0182 N73-19091
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Pharmacological measures for prophylactic and restorative treatment of men and animals during space flight
p0212 N73-20060
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119
Barotrauma mechanoreceptor reflex effects on animal respiratory and circulatory system
p0252 N73-21982
Neurophysiology of sleep and wakefulness in fish, amphibians, birds, and reptiles
p0257 N73-22025
Interdependence of slow and rapid brain waves during sleep
p0257 N73-22027
Thermal effects of microwave and radio frequency radiation on biological systems
[NBL-1971-7-PT-1] p0264 N73-23048
Voice communication and hearing in acoustic orientation systems of animals at various evolution levels
[DRIC-TRANS-3056] p0298 N73-25121
Physiological stress effects of aerospace environment on human body and animals
[NASA-TT-P-15081] p0437 N73-32001
ANIMATION
U MOTION
ANISOTROPIC MEDIA
Strength limits correlation to modulus of elasticity for compact bone material from compression tests, noting anisotropy tensor analysis
p0045 A73-13744
ANNUAL VARIATIONS
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357
ANOMALIES
U ABNORMALITIES
ANOXIA
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
ANTARCTIC REGIONS
Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards
p0396 A73-42162
Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347
Human factors investigations and acclimatization research conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29348
Investigation of oribatid mites found in Antarctic regions during Tenth Soviet Antarctic Expedition
p0379 N73-29349
Medical analysis of vitamin balance among personnel of Tenth Soviet Antarctic Expedition to show effects on health and acclimatization ability
p0379 N73-29357
Analysis of physiological effects of diet on personnel of Tenth Soviet Antarctic Expedition
p0379 N73-29358
Analysis of microclimate of living and service quarters during Tenth Soviet Antarctic Expedition
p0379 N73-29359
Seasonal plankton collections conducted during Tenth Antarctic Expedition
p0379 N73-29363
ANTARCTICA
U ANTARCTIC REGIONS
ANTENNA FIELDS
U ANTENNA RADIATION PATTERNS
ANTENNA RADIATION PATTERNS
Microwave radiation hazards around large microwave antenna.
p0343 A73-37274
ANTENNAS
NT AIRCRAFT ANTENNAS
NT MICROWAVE ANTENNAS
NT RADIO ANTENNAS
ANTHROPOMETRY
The use of bivariate distributions in achieving anthropometric compatibility in equipment design. I, II.
p0081 A73-16702
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.

p0094 A73-18337
Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics
p0096 A73-18474
A comparison and analysis of head sizes of Navy aircrew to the standard anthropometric data.
p0284 A73-32656
Anthropometric dummy design improvements, detailing verisimilitude specifications for harness support in accident tests and design of chest, spine, shoulder and pelvic areas
p0306 A73-34617
An anthropomorphic master-slave manipulator system.
p0344 A73-37316
Evaluation of the physical conditions of individual airmen
p0425 A73-43790
Armed forces anthropometric survey of 6682 Army men
[AD-743465] p0604 N73-10160
Anthropometric survey of US army aviators conducted in 1970
[AD-743528] p0605 N73-10162
Anthropometric data of Japanese Air Self-Defense Force personnel
p0101 N73-14091
Anthropometric measurements of military personnel engaged in underwater diving to development standards for design of equipment
[AD-748627] p0114 N73-15175
Color photographic system using grid projector and telecentric lenses for recording contours of human face for aircrew oxygen mask fitting
[RAE-TR-71184] p0141 N73-16099
Multivariate limits for describing cockpit related anthropometric features of aviation personnel
[AD-752032] p0151 N73-17124
Quantitative description of mobility for human torso
[AD-754924] p0223 N73-20151
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
Anthropometry for protective equipment evaluation and human impact acceleration experiments
p0266 N73-23066
Bibliography of anthropometric information for Air Force human factors engineering
[AD-762287] p0371 N73-27978
Mass, volume, center of mass, and mass moment of intertia determined for head and neck of human body
[AD-762581] p0377 N73-29065

ANTIADRENERGICS
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015
The pharmacology of practolol - A cardioselective beta adrenergic blocking drug.
p0153 A73-21850
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations
p0321 A73-36546
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660

ANTIBIOTICS
NT ACTINOMYCIN
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399

ANTIBODIES
Russian book on auto-antibodies of X ray irradiated animal and human blood and organisms covering cell formation, isolation, preparations, sickness treatment and auto-immune reactions
p0060 A73-15711
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure
p0087 A73-17685
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
Effects of chronic irradiation of dogs with Co-60 gamma rays on the level of auto-antibodies
p0208 A73-27706
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
Localized shielding effects on antitissue antibody mobilization in irradiated rats
p0064 N73-12086

ANTICHOLINERGICS
Effects of phosdrin on electrical brain potentials in squirrel monkeys
[FAA-AM-73-3] p0338 N73-27056

ANTICLINAL MOUNTAINS
U MOUNTAINS

ANTICOAGULANTS
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319

ANTIDIURETICS
Renal component of the antigravitation function of the organism
p0123 A73-20976
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Radioimmunoassay of urinary antidiuretic hormone excretion in man considering water loading and dehydration effects
p0174 N73-18107
Measurement of antidiuretic hormone excretions in human urine as indication of neurosecretory stress response during space flight
p0174 N73-18108

ANTIDOTES
Protective effects of pyridinium salts against alkyl phosphate poisoning including influence of chemical and aging
[BMVG-FBWT-72-8] p0137 N73-16072

ANTIGENS
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729

ANTIGRAVITY
Renal component of the antigravitation function of the organism
p0123 A73-20976

ANTIINFECTIVES AND ANTIBACTERIALS
New formaldehyde base disinfectants.
p0424 A73-43276

ANTIOXIDANTS
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Effect of hypoxia and hyperoxia on rate of blood deoxygenation, and influence of antioxidants in mice
p0216 N73-20096

ANTIRADIATION DRUGS
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586
Antiradial properties of DNA and of its denaturation products
p0098 A73-18875

Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
Protection of humans from radiation injuries by chemical means
[NRC-TT-1609] p0106 N73-15112
Effectiveness of pharmacochemical protective substances on irradiated mice as neutron component increases
[DRIC-TRANS-2961] p0108 N73-15124
Effectiveness of polymer complex of cysteamine and sulfopropyl ester of dextran as an antiradiation drug on irradiated mice
[DRIC-TRANS-2963] p0108 N73-15125
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Effects of antiradiation drug dosage on mice and rat tolerance to transverse acceleration overloads
p0211 N73-20055
Resistance of mice to acceleration overloads after injection of aminothiol group radioprotector
p0211 N73-20056
Bradycardia and death in guinea pigs exposed to acceleration overloads after injections of aminothiol group radioprotectors
p0211 N73-20057
Hypoxia and reduced acceleration tolerance of rats after injection of cysteamine radioprotector
p0211 N73-20058
Pathophysiological response reactions of rats to acute hypoxia after injection of cysteamine and aminothiol group radioprotector
p0211 N73-20059
Transverse acceleration overload effects on mice sensitivity to toxic doses of cysteamine and aminothiol group antiradiation drugs
p0212 N73-20061
Effects of radioprotective drugs on motor evacuatory functions in gastrointestinal tracts of healthy and irradiated rats
p0212 N73-20062
Classification of radioprotectors for radiation sickness prevention effects
p0212 N73-20065
Pharmacological data for aminothiol and indolylalkylamine radioprotectors
p0212 N73-20066
Antiradiation effectiveness of cysteamine in mice under various conditions of gamma radiation
p0212 N73-20067
Effectiveness of combined chemical protectors against mixed gamma-neutron radiation with neutron contributions to absorbed dose
p0212 N73-20068
Reactivity changes of rats to antiradiation drugs with head and stomach shielded during total irradiation
p0213 N73-20072
Mortality rate in antiradiation drug protected mice subjected to gamma radiation overloads
p0214 N73-20079
Aminothiol radioprotector, finam, effect on irradiated animal tissues under various conditions
p0215 N73-20085
Exposure to gamma rays from Co-60 and transverse loads and effectiveness of cysteamine and ART protection
p0215 N73-20086
Effect of some radioprotective preparations on motor and evacuator function of gastrointestinal tract of healthy and irradiated rats
[DRIC-TRANS-2962] p0229 N73-21130
Antiradiation drug effects on vestibular analyzer functions
p0263 N73-23033

ANTISEPTICS
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
New formaldehyde base disinfectants.
p0424 A73-43276
Daylight and disinfectant effects on bacteria survival times on plastic surfaces
[NASA-TT-F-13923] p0592 N73-10069
ANXIETY
The effect of anxiety control on the level of information processing
p0425 A73-43848
Relating test anxiety and trait-state anxiety
[AD-746453] p0066 N73-12104
AORTA
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655
Velocity distribution in aortic flow.
p0408 A73-43104
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160
APATITES
U MINERALS
APNEA
U RESPIRATION
APOLLO FLIGHTS
NT APOLLO 11 FLIGHT
NT APOLLO 12 FLIGHT
NT APOLLO 14 FLIGHT
NT APOLLO 15 FLIGHT
NT APOLLO 16 FLIGHT
NT APOLLO 17 FLIGHT
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet.
p0355 A73-39103
APOLLO LUNAR EXPERIMENT MODULE
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983
APOLLO PROJECT
Philosophical and social psychological study of Apollo moon scientist
[NASA-CR-130832] p0176 N73-18122
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] p0439 N73-32012
APOLLO SPACECRAFT
NT APOLLO LUNAR EXPERIMENT MODULE
APOLLO 11 FLIGHT
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias

obtained by vacuum pyrolysis, acid hydrolysis and crushing
p0095 A73-18418

APOLLO 12 FLIGHT
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias obtained by vacuum pyrolysis, acid hydrolysis and crushing
p0095 A73-18418
Effects of Apollo 12 lunar materials on lipid levels, including fatty acids and sterols, of tobacco tissue and slash pine cultures
[NASA-CR-128606] p0591 N73-10063
Cytological changes in pine tissues treated with lunar materials collected on Apollo 12 quarantine mission
[NASA-CR-128914] p0265 N73-23054

APOLLO 14 FLIGHT
Microbial analysis of Apollo 14 astronauts
[NASA-TM-X-58094] p0099 N73-14073
Neutron activation analysis of cosmic radiation doses in Apollo 14, 15, and 16 astronauts
[NASA-CR-131984] p0267 N73-23070

APOLLO 15 FLIGHT
Neutron activation analysis of cosmic radiation doses in Apollo 14, 15, and 16 astronauts
[NASA-CR-131984] p0267 N73-23070

APOLLO 16 FLIGHT
Apollo 16 flight program for investigating physiological effects of prolonged weightlessness on central nervous system, vestibular, neuromuscular and cardiovascular functions, metabolism, radiation sensitivity and body weight
p0398 A73-42176
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds
p0399 A73-42185
Free electrophoresis in zero gravity on Apollo 16 flight
[NASA-CR-123920] p0606 N73-11055
Analysis of nutrient intake and absorption during Apollo 16 flight
[NASA-TM-X-58096] p0067 N73-12110
Apollo 16 experiment using biostack to determine effects of heavy nuclei on biological organisms
p0232 N73-21761
Apollo 16 microbiological experiment on microbial response to aerospace environments - Part B
p0232 N73-21762
Light flash observation experiments conducted by Apollo 16 astronauts - Part C
p0233 N73-21763
BIOSTACK experiment on Apollo 16 for studying combined action of heavy high energy loss nuclei and space flight factors on resting biological systems
p0266 N73-23062
Neutron activation analysis of cosmic radiation doses in Apollo 14, 15, and 16 astronauts
[NASA-CR-131984] p0267 N73-23070
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Design of microbial test system for Apollo 16 mission
p0291 N73-24103
Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress
p0291 N73-24106
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107
Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores
p0291 N73-24108
Space flight ultraviolet irradiation effects on Bacillus thuringiensis toxin production capability
p0291 N73-24109
Phenotype numbers and survival rates of fungi exposed to space environment during Apollo 16 flight
p0292 N73-24110
Ultraviolet space irradiation effects on Aeromonas proteolytica extracellular enzyme production
p0292 N73-24111
Potassium ferrioxalate actinometric measurements of solar ultraviolet photobiological energy
p0292 N73-24113
Nuclear track dosimetry for monitoring cosmic ray exposure of Apollo 16 astronauts
p0292 N73-24114
Lithium fluoride thermoluminescent dosimeter for measuring ionizing radiation exposure during Apollo 16 flight
p0292 N73-24115

APOLLO 17 FLIGHT
Microbiological studies of Apollo 17 command module preflight and postflight samples
[NASA-CR-132022] p0265 N73-23056

APPARATUS
U EQUIPMENT

APPENDAGES
NT ARM (ANATOMY)
NT ELBOW (ANATOMY)
NT FOREARM
NT HAND (ANATOMY)
NT KNEE (ANATOMY)
NT LEG (ANATOMY)

APPROACH CONTROL
Aircrew workload during the approach and landing.
p0351 A73-38005
Pilot visual threshold and perception for aircraft movement estimation during unaided visual approach control
p0600 N73-10125
Visual cue reinforcement for skill retention in pilot simulated space vehicle approach and landing performance
[NASA-CR-128912] p0269 N73-23086

APPROACH INDICATORS
Functional aspects of head-up display operation, discussing data accumulated by pilot during low visibility runway approach in executive jet
p0581 A73-11012

APPROXIMATION
NT FINITE ELEMENT METHOD

APTITUDE
Proposed new test for aptitude screening of air traffic controller applicants.
p0155 A73-22535
Comparison of age, education, pre-FAA experience, aptitudes, training course performance, and post-Academy attrition rates of male and female trainees
[FAA-AM-72-22] p0611 N73-11094
Color aptitude of dyschromatopsia French navigators and pilots
p0179 N73-19068

AQUEOUS SOLUTIONS
Effectiveness of sodium hydrocarbonate as means for treating and preventing motion sickness
p0135 N73-16057
Gas chromatographic analysis of beryllium in aqueous solutions and biological tissues
[AD-753112] p0177 N73-18131

ARAGONITE
Biogeochemistry of aragonite mud and oolites.
p0056 A73-14662

ARCTIC REGIONS
Problems related to high-performance flight in the Arctic regions
p0332 A73-36953

ARGON
Physiological effects of argon/oxygen breathing on rats noting carbon dioxide level
p0182 N73-19094

ARGON LASERS
Argon laser radiation damage to retina of diabetic and nondiabetic patients
[AD-747058] p0071 N73-13099

ARIP (IMPACT PREDICTION)
U COMPUTERIZED SIMULATION

ARM (ANATOMY)
NT ELBOW (ANATOMY)
NT FOREARM
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643

ARMED FORCES
NT ARMED FORCES (FOREIGN)
NT ARMED FORCES (UNITED STATES)
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034

Work-rest schedules for military tracking crews under prolonged vibration
p0271 N73-23986
ARMED FORCES (FOREIGN)
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army
p0329 A73-36929
Color vision requirements for German Air Force personnel
p0179 N73-19067
Color vision requirements of Canadian Armed Forces, including their standard tests
p0179 N73-19070
Color vision requirements of Great Britain's Armed Forces
p0179 N73-19072
Physiological method for selecting and observing student pilots in Belgian Air Force for motion sickness
p0226 N73-21099
ARMED FORCES (UNITED STATES)
Armed forces anthropometric survey of 6682 Army men [AD-743465]
p0604 N73-10160
Anthropometric survey of US army aviators conducted in 1970 [AD-743528]
p0605 N73-10162
Survey of industrial hygiene and safety in Air Forces operations [AD-751897]
p0151 N73-17126
Comparison of accident rates among color defective and normal personnel
p0179 N73-19073
AROUSAL
Electroencephalographic and behavioral responses of humans to aircraft noise during sleep [NASA-CR-2279]
p0338 N73-27058
ARRHYTHMIA
Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
Telemetrical measurements during sport performance on sportsmen with cardiac arrhytmias.
p0054 A73-14294
Use of an on-line computer in a study of cardiac arrhythmia.
p0059 A73-15644
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872
Ultrastructure of the atrial, ventricular, and Purkinje cell, with special reference to the genesis of arrhythmias.
p0097 A73-18873
Cardiac arrhythmias generation by impulse initiation and conduction abnormalities, considering depressed excitability, reentrant excitation, summation, inhibition and parasystole
p0097 A73-18874
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051
Heart rate variability and the measurement of mental load; Proceedings of the Symposium, London, England, October 1971.
p0250 A73-30876
Psychological factors influencing the relationship between cardiac arrhythmia and mental load.
p0250 A73-30877
Blood pressure and body temperature dynamic control systems and respiration relationship to heart rate variability
p0250 A73-30878
Heart rate variability and work-load measurement.
p0250 A73-30879
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880
Heart rate variability analysis for ergonomics purposes, discussing interpolations, algorithms and physiological effects and spectral analysis methods
p0250 A73-30882
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525
Mechanisms of cardiac arrhythmias - From hypothesis to physiologic fact.
p0347 A73-37582
Hyperbaric chamber used to determine influence of increased ambient pressure and gas density on cardiac rate in man [AD-755129]
p0261 N73-22058
ARSENIC COMPOUNDS
Salvarsan therapy of luetic patients and behavior of Wassermann reaction [NASA-TT-F-14618]
p0609 N73-11076
ARTEMIA
Dosimetric analyses for Biosatellite 2 yeast and artemia radiation exposure experiment [NASA-CR-127142]
p0069 N73-13082
ARTERIES
NT AORTA
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs
p0585 A73-12151
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity.
p0085 A73-17274
Long-term observations in patients with angina and normal coronary arteriograms.
p0097 A73-18871
Formalization of an arterial pressure stabilization system
p0168 A73-24467
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220

Factors influencing coronary blood flow in the presence of coronary obstructive disease. p0321 A73-36539
Angiotensiotonography using an air plethysmograph p0322 A73-36575
Morphometry of the human pulmonary arterial tree. p0384 A73-40639
Cerebral tolerance to asphyxial hypoxia in the dog. p0399 A73-42202
A new method of measuring arterial dilation and its application. p0402 A73-42669
Indications and value of coronary arteriography. p0405 A73-42830
The value of different angiographic procedures in coronary heart disease. p0405 A73-42831
Transcutaneous measurement of blood velocity profiles and flow. p0408 A73-43108
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography. p0428 A73-44469
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries p0429 A73-44720
Transducer for converting arterial pulse wave into electric signals [NASA-CASE-GSC-11531-1] p0612 N73-11097
Analysis of arterial hypoxemia caused by pulmonary malfunctions and regulation of oxygen during exercise and rest [AD-746979] p0071 N73-13092
Influence of elastic properties of human body on arterial blood pressure measurement p0099 N73-14072
Human arterial elasticity during breathing of reduced partial oxygen atmosphere p0253 N73-21987
Arterial hypertension symptoms in flying personnel p0253 N73-21991
Measurement of arterial pressure under influence of ODNT [NASA-TT-F-15087] p0437 N73-31998

ARTERIOSCLEROSIS
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions p0087 A73-17689
Coronary atherosclerosis development and prevention in children, discussing hyperlipidemia, hypertension, cigarette smoking and high risk identification p0243 A73-30065
Prevention of the atherosclerotic diseases - Opportunities for military medicine. p0248 A73-30518
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system p0277 A73-31173
Book - Atherosclerosis and coronary heart disease. p0320 A73-36531
Hereditary aspects of coronary atherosclerosis. p0320 A73-36532
Serum cholesterol and plasma lipid elevation separation of hypercholesterolemic patients for atherosclerosis therapy p0320 A73-36533
Lipids in arteriosclerotic arterial tissues of man. p0320 A73-36534
Cigarette-smoking and coronary atherosclerosis. p0320 A73-36535
Localizing factors in experimental atherosclerosis. p0320 A73-36536
Localizing factors in arteriosclerosis. p0320 A73-36537
Coronary atherosclerosis and ischemic myocardial damage. p0320 A73-36538
Electrocardiographic diagnosis of myocardial infarction - Pitfalls of a graphic technique. p0321 A73-36544
The prognosis of myocardial infarction. p0321 A73-36549
Detection of atherosclerosis in examinations of flight personnel p0328 A73-36913
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology p0332 A73-36962
Information yield of the Annual Medical Examination for Flying. p0356 A73-39110
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses. p0387 A73-41162
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971. p0404 A73-42826
The early diagnosis of coronary heart disease - Critical review. p0404 A73-42827
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors p0404 A73-42828
Mechanisms of hyperlipidaemias in different clinical conditions. p0405 A73-42832
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography. p0428 A73-44469
Flight stress effects on cardiovascular reactions of pilots with atherosclerosis p0064 N73-12090
Atherosclerosis and hypertonia under high mountain conditions and seasonal effects [NASA-TT-F-745] p0176 N73-18121
Changes in vectorcardiograms of atherosclerotic flying personnel after glucose testing p0253 N73-21989

ARTHROPODS
NT ARTEMIA
NT BEES
NT CRABS
NT DROSOPHILA
NT INSECTS
NT LARVAE
NT TRIBOLIA
Dioptric apparatus of arthropod compound eyes, describing optical characteristics of apposition eye p0161 A73-23310
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/. p0282 A73-32185

ARTICULATION
A study of evoked slow activities in man which follow a voluntary movement and articulated speech p0359 A73-39759

ARTIFACTS
Hazard and interference avoidance in implant telemetry, discussing leakage currents, muscle interference, magnetic influence, high frequency noise, electrode and respiratory artifacts, etc p0054 A73-14295
Upper eye lid position effects in electro-oculographic vertical eye movement recordings p0110 N73-15143

ARTIFICIAL EARS
Design and performance of wideband artificial ear for calibrating audiometric earphones [AD-746691] p0073 N73-13112

ARTIFICIAL GRAVITY
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights. p0582 A73-11209
Effect of hypergravity on the circadian rhythms of white rats. [ASME PAPER 72-WA/BHF-14] p0061 A73-15877
Seat reaction direction in an animal centrifuge. p0116 A73-19478
Findings on American astronauts bearing on the issue of artificial gravity for future manned

space vehicles.
p0154 A73-22531
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111
ARTIFICIAL HEART VALVES
Carpentier reconstructive valvuloplasty technique of mitral valve insertion from viewpoint of pilots return to flying duties
p0586 A73-12157
Pu-238 grade fuels for supplying power to artificial heart and circulatory assist devices
[LA-DC-72-473] p0067 N73-12115
ARTIFICIAL INTELLIGENCE
Statistical analysis of air combat situation evaluations conducted by US Navy pilots to detect differences caused by experience
[AD-747519] p0068 N73-12119
Computerized simulation of three dimensional robots using generalized cylinder descriptions
[AD-755139] p0223 N73-20152
Artificial intelligence in integrated circuit control of bionic manipulators
[NASA-CR-131403] p0224 N73-20156
ARTIFICIAL RESPIRATION
U RESUSCITATION
ARTIFICIAL SATELLITES
NT BIOSATELLITE 2
NT COMMUNICATION SATELLITES
NT ORBITAL SPACE STATIONS
ARTS
NT ABILITIES
ASCORBIC ACID
Influence of cysteamine hydrochlorine and vitamin B and C prophylaxis on radiation sickness in humans
p0214 N73-20078
ASCORBIC ACID METABOLISM
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
ASPHYXIA
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202
ASSESSMENTS
NT TECHNOLOGY ASSESSMENT
ASSIMILATION
Contrast and assimilation effects analysis based on receptive field models of vertebrate retinal function
p0123 A73-20812
ASTIGMATISM
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
Weightlessness effects on development of vestibular apparatus and ocular nystagmus in rat, using chronic 2g centrifuge
[NASA-CR-114569] p0149 N73-17112
ASTROBIOLOGY
U EXOBIOLOGY
ASTRONAUT LOCOMOTION
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Biomechanics of locomotion via jumping on lunar surface, discussing subgravity effects on energy requirements, body potential and kinetic energy, muscular work, etc
p0397 A73-42175
Dynamic changes in psychophysiological motor efficiency of cosmonauts in flight
[JPRS-57417] p0602 N73-10140
ASTRONAUT MANEUVERING EQUIPMENT
Feasibility of limb controlled astronaut maneuvering scheme
p0339 N73-27063
ASTRONAUT PERFORMANCE
Quality /probability/ evaluation of human operator ergatic processes controlling spacecraft during rendezvous and docking with orbital station
p0087 A73-17686
Emotional stresses during a space flight
p0116 A73-19297
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Work movement performance of the astronaut in flight.
p0207 A73-27645
Asymmetry of otolith responses in fish
p0279 A73-31507
Skylab astronaut vestibular function experiment in orbital flight, discussing motion sickness susceptibility, stimulation thresholds and space perception measurements
p0307 A73-34741
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
Effect of certain flight factors on crew efficiency
p0383 A73-40350
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Human sensorimotor coordination following space flights.
p0397 A73-42170
Astronaut manual performance limits in intravehicular Skylab environment
[NASA-CR-128590] p0603 N73-10150
Psychological assessment techniques for determining astronaut attentional flexibility and associate performance
[NASA-CR-128945] p0295 N73-24136
Human factors analysis of astronaut working conditions in space vehicles
[NASA-TT-F-750] p0366 N73-27946
ASTRONAUT TRAINING
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Bioelectric monitoring and motion picture surveying for improved physical training of astronauts
p0263 N73-23039
ASTRONAUTS
Cosmic radiation dosage measurements on Apollo astronauts by Lexan dosimetry
[AD-745188] p0596 N73-10101
Microbial analysis of Apollo 14 astronauts
[NASA-TM-X-58094] p0099 N73-14073
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-130538] p0150 N73-17114
Light flash observation experiments conducted by Apollo 16 astronauts - Part C
p0233 N73-21763
Nuclear track dosimetry for monitoring cosmic ray exposure of Apollo 16 astronauts
p0292 N73-24114
Data analysis for predicting human personal hygienic needs during long term space flight
[NASA-CR-128929] p0295 N73-24132
Analytical gas chromatography and mass spectrography for physiological monitoring of astronauts
[NASA-CR-133272] p0338 N73-27059
Radioactivity urinalysis for calculating postflight astronaut cosmic radiation exposure

[NASA-CR-133378] p0365 N73-27939
Laboratory investigation of coriolis acceleration effects on vestibular apparatus of cosmonauts
[NASA-TT-F-15129] p0417 N73-30993
ATAXIA
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
ATHEROSCLEROSIS
U ARTERIOSCLEROSIS
ATHLETES
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
Passive and active warm-up effects on track athletes heart and respiration rates
p0042 A73-13123
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Telemetrical measurements during sport performance on sportsmen with cardiac arrhytmias.
p0054 A73-14294
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
Effect of physical exercises on the lung rheogram
p0169 A73-24524
Influence of time zones on physiological organs and systems and performance of athlete
[NASA-TT-F-14632] p0073 N73-13116
ATMOSPHERIC ABSORPTION
U ATMOSPHERIC ATTENUATION
ATMOSPHERIC ATTENUATION
Atmospheric effects on laser propagation and impact on eye safety
[AD-755405] p0259 N73-22044
ATMOSPHERIC COMPOSITION
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Human ability to note changes in composition of inhaled air
p0182 N73-19090
Toxicity of gaseous urine and feces emissions on rat organism
p0182 N73-19097
Food heating tests in different atmospheres
[NASA-CR-134040] p0419 N73-31012
Food consumption and morphological indices of blood in white mice with replacement of air nitrogen by inert gases in pressurized chamber
p0442 N73-33020
Dynamics of weight change and variations in weight indices of internal organs in white mice as function of atmospheric composition and diet
p0443 N73-33022
Biological evaluation of influence of helium-oxygen atmosphere on culture of mammalian cells
p0443 N73-33024
ATMOSPHERIC CONDITIONS
U METEOROLOGY
ATMOSPHERIC ENTRY
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
Spacecraft microbial burden reduction for Jupiter due to atmospheric entry heating
[NASA-CR-132072] p0292 N73-24117
ATMOSPHERIC HEATING
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
ATMOSPHERIC IMPURITIES
U AIR POLLUTION
ATMOSPHERIC IONIZATION
Various opinions on physical and mental exhaustion caused by atmospheric ion shortage
[NASA-TT-F-14646] p0070 N73-13088
ATMOSPHERIC MODELS
NT DYNAMIC MODELS
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
Atmospheric models for evaluating nuclear facility sites
[BNWL-1651-VOL-2-PT-1] p0446 N73-33044
ATMOSPHERIC NEUTRON FLUX DENSITY
U ATMOSPHERIC RADIATION
ATMOSPHERIC PRESSURE
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
The diluter-demand oxygen system used during the international Himalayan expedition to Mount Everest.
p0194 A73-25145
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
Effects of alterations in barometric pressure on humans
p0104 N73-15092
Effects of reduced atmospheric pressure, elimination of nitrogen, hypoxia, and exposure to restricted visual environment on range of accommodation and color vision
[NASA-CR-128896] p0258 N73-22037
ATMOSPHERIC RADIATION
NT TWILIGHT GLOW
Effects of radiation and heat balance of active surface on life processes of plants with emphasis on productivity of cotton
p0378 N73-29323
ATOMIC EXPLOSIONS
U NUCLEAR EXPLOSIONS
ATP
U ADENOSINE TRIPHOSPHATE (ATP)
ATROPHY
Dystrophic degeneration of suprarenal rat cortex during hypokinesia
p0254 N73-22003
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
ATROPINE
Temporary blindness of monkeys caused by combined effects of phosdrin and atropine exposure
[FAA-AM-73-4] p0338 N73-27055
ATTACK AIRCRAFT
NT A-7 AIRCRAFT
ATTENTION
Attention field and perception probability distribution mechanisms of Muller-Lyer illusion due to angle contour
p0120 A73-20255
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
Self-estimates of distractibility as related to performance decrement on task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
Human attention and reaction performance as function of type and latency in response to signal stimulus
[AD-747801] p0073 N73-13110
Cyclically changing temperature effects on monitoring behavior and physiological responses of man
[AD-748451] p0104 N73-14110
ATTENUATION
NT ACOUSTIC ATTENUATION
NT ATMOSPHERIC ATTENUATION
Light beam attenuation in suspensions of algae
p0378 N73-29325
ATTENUATORS
NT RESISTORS
ATTITUDE (INCLINATION)
NT PITCH (INCLINATION)
NT ROLL

NT YAW
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli p0096 A73-18624
Seat reaction direction in an animal centrifuge. p0116 A73-19478
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn. p0117 A73-19485
Spatial frequency selectivity of a visual tilt illusion. p0392 A73-41642

ATTITUDE CONTROL
NT DIRECTIONAL CONTROL

ATTITUDE INDICATORS
An instrument panel on an image tube in color p0128 A73-21543

AUDIO EQUIPMENT
NT EARPHONES
NT LOUDSPEAKERS
NT MICROPHONES

AUDIO FREQUENCIES
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure. p0425 A73-43500
Analysis and perception of nonspeech marine sounds [OES-6/72] p0421 N73-31023

AUDIO VISUAL EQUIPMENT
U TRAINING DEVICES
U VISUAL AIDS

AUDIOLOGY
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print. p0196 A73-25475

AUDIOMETRY
Study of the acoustic reflex in human beings. I - Dynamic characteristics. p0581 A73-10828
German monograph - Investigations regarding auditory depth perception and the problem of in-head localization of acoustic events. p0240 A73-29278
Current aspects of the cochlear function in members of flight crews p0330 A73-36940
Voltage controlled attenuator circuit for acoustic signal duration and repetition control in hearing examinations p0432 A73-44910
Speech and tone audiometry for testing auditory acuity of flying personnel p0253 N73-21990
Audiometric thresholds for bare headed subjects, or wearing M1 helmet, and experimental helmet [AD-745121] p0260 N73-22053

AUDITORY DEFECTS
Electron-microscopy investigation of Corti's organ after noise trauma p0078 A73-16333
Book - Human factor aspects of aircraft noise. p0206 A73-27450
Impairment to hearing from exposure to noise. p0287 A73-33676
Hearing conservation studies covering impulse noise produced threshold shift, damage risk criteria, ultrasound hazards and hearing protection p0309 A73-35326
Impulse noise damage risk criteria. p0310 A73-35327
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes. p0330 A73-36934
Corti organ lesion effects on signal perception in patients with noise induced hearing loss, correlating speech discrimination with age and sound level p0352 A73-38182
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure. p0425 A73-43500
Influence of cockpit noise on hearing in flight crew personnel [FAA-AM-72-32] p0185 N73-19125
Speech discrimination by personnel with hearing loss at 3 kHz in noise [AD-752974] p0298 N73-25118
Evaluation of hearing protectors for general aviation aircraft [NASA-CR-133303] p0341 N73-27078

AUDITORY PERCEPTION
Some modeling problems of loudness transformations by the auditory system p0060 A73-15790
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system. p0078 A73-16249
Study of the peripheral auditory adaptation in a psycho-acoustic experiment p0164 A73-23807
Functional model of the frequency channel of the peripheral auditory analysor p0164 A73-23808
Binaural interaction effects on afterperception of white noise pulse sequences delivered to both ears simultaneously or after various intervals p0167 A73-24333
Problem of localization in the median plane - Effect of pinnae cavity occlusion. p0193 A73-24976
Dynamics of changes in neuron activity regimes of the ascending auditory pathways p0199 A73-26079
German monograph - Investigations regarding auditory depth perception and the problem of in-head localization of acoustic events. p0240 A73-29278
Book - Foundations of modern auditory theory. Volume 2. p0243 A73-30276
Acoustic model and linguistic, syntactic, lexical and semantic factors in speech perception and production process p0243 A73-30277
Psychoacoustic theory of signal detectability based on mathematical input-output mapping model and memory role in human auditory system p0243 A73-30278
Neuroanatomy of the auditory system. p0244 A73-30280
Binaural acoustic field sampling, head movement and echo effect in auditory localization of sound sources position, distance and orientation p0244 A73-30282
Vector correlation theory and neural mechanisms of binaural signal detection in human auditory system p0244 A73-30283
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses. p0288 A73-33678
Current aspects of the cochlear function in members of flight crews p0330 A73-36940
Pure-tone equal-loudness contours for standard tones of different frequencies. p0387 A73-41176
Loudness changes resulting from an electrically induced middle-ear reflex. p0393 A73-41815
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition p0393 A73-41816
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex p0394 A73-41958
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli p0401 A73-42654
Reaction time to changes in the tempo of acoustic pulse trains. p0404 A73-42705
Functional state of the auditory analysor under conditions of prolonged clinostatic hypokinesia p0425 A73-43789
Asymmetry in perception - Attention versus other determinants. p0435 A73-45338
Binaural improvement in normal and defective ears in background of other voices [AD-746101] p0597 N73-10103

Effect of concurrent audio tasks on human operator compensatory tracking performance using manual control system
p0602 N73-10139
Dynamic model for pilot manual control ability using aural compensatory tracking
p0602 N73-10142
Psychophysical analysis of RF sound perception in human subjects
[AD-747684] p0099 N73-14076
Physical correlations of hearing, auditory system, and hearing loss
p0105 N73-15105
Blockage effect in external ear canal on diver auditory perception threshold
[AD-751664] p0177 N73-18132
Speech and tone audiometry for testing auditory acuity of flying personnel
p0253 N73-21990
Human perception of musical intervals between simultaneous tones
[IZF-1972-20] p0268 N73-23078
Real time hybrid computer audio synthesis system
[AD-761730] p0369 N73-27968
Analysis and perception of nonspeech marine sounds
[ORS-6/72] p0421 N73-31023

AUDITORY SENSATION AREAS
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940
Functional properties of auditory cortex neurons in a controlled experiment
p0362 A73-39802
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248
Frequency selectivity and two tone inhibition in neural coding of acoustic stimuli
[IZF-1972-25] p0264 N73-23050
Behavioral learning response of cat to electric stimulation of auditory nervous system
[NASA-CR-132047] p0293 N73-24124

AUDITORY SIGNALS
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
Interaural difference thresholds in binaural perception of signals nonexistent in normal acoustic environment, considering beats, memory, learning, and stereophony
p0244 A73-30285
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/
p0249 A73-30843
Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161
Voltage controlled attenuator circuit for acoustic signal duration and repetition control in hearing examinations
p0432 A73-44910
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248

AUDITORY STIMULI
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
Study of the acoustic reflex in human beings. I - Dynamic characteristics.
p0581 A73-10828
An earphone coupling system for acute physiological studies.
p0581 A73-10829
Auditory rail task for acoustic stimuli effects on human equilibrium under axisymmetric intermittent tone exposure, discussing acoustic energy effect on vestibular receptors
p0044 A73-13551
Effects of intermittent and continuous noise on serial search performance.
p0044 A73-13560
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis
p0092 A73-18163
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Sinusoidal stimuli induced electrical activity of hippocampus in waking rhesus monkeys and baboons
p0167 A73-24330
Binaural interaction effects on afterperception of white noise pulse sequences delivered to both ears simultaneously or after various intervals
p0167 A73-24333
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
Interindividual differences in homomodal and heteromodal scaling of auditory and vibrotactile stimulation intensity and duration, using magnitude estimation method
p0204 A73-26750
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
Binaural signal detection - Equalization and cancellation theory.
p0244 A73-30284
Evoked negative electrical potentials due to auditory zone stimulation by local cooling, mechanical trauma and potential recording, observing reaction regeneration variations
p0276 A73-31159
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654

Action of stable and pulsed noise on the processes of skeletal muscle excitation
p0402 A73-42662
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705
Effects of direct auditory feedback of electromyogram on learning to control single unit [AD-745107] p0605 N73-10165
Mathematical models for studying vestibular adaptation to stimuli in humans [AMRU-R-70-1] p0607 N73-11062
Frequency selectivity and two tone inhibition in neural coding of acoustic stimuli [IZF-1972-25] p0264 N73-23050
Pilot performance in dual time-sharing tracking task [AD-755363] p0269 N73-23088
Mathematical models for deriving loudness function from physical evidence without human judgment [NASA-TN-D-7297] p0293 N73-24121
Cross correlation analysis of stress rhythm during stimuli of varying biological significance
p0450 N73-33071

AUDITORY TASKS
Auditory rail task for acoustic stimuli effects on human equilibrium under axisymmetric intermittent tone exposure, discussing acoustic energy effect on vestibular receptors
p0044 A73-13551
EEG alterations by short time stress due to delayed speech feedback during reading, noting alpha and beta wave changes
p0056 A73-14473
Effects of 24-hour sleep deprivation on rate of decrement in a 10-minute auditory reaction time task.
p0058 A73-15220
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis
p0093 A73-18244
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task.
p0283 A73-32395
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
Binaural processing of speech intelligibility in light aircraft [FAA-AM-72-31] p0102 N73-14094
Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks [OES-8/72] p0421 N73-31024

AUROBAL EMISSION
U LIGHT EMISSION

AUTOKINESIS
Autokinetic movement as a function of the implied movement of target shape.
p0117 A73-19549
Random dot pattern luminance and contrast effects on limiting inter-stimulus interval for visual apparent motion masking by bright field
p0120 A73-20256
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception
p0121 A73-20262
Effects of prolonged dark adaptation on autokinetic movement.
p0202 A73-26322
Monocular fixation tests and prediction model for time course of aftereffect of eye turn on autokinetic illusion direction
p0235 A73-28098

AUTOMATA THEORY
Automaton synthesis and perceptron learning for controlled objects classification according to unknown features, noting adaptive relationships between retina and associative elements
p0119 A73-20047
Stability behavior of adapting and untrained random logic nets, enabling intelligent interaction with environment
p0122 A73-20400
Investigation of the nature of biological rhythm sensors by means of automatic networks
p0393 A73-41865
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973

AUTOMATIC CONTROL
NT ADAPTIVE CONTROL
NT AUTOMATIC FLIGHT CONTROL
NT DYNAMIC CONTROL
NT FEEDBACK CONTROL
NT LEARNING MACHINES
NT NUMERICAL CONTROL
NT OPTIMAL CONTROL
NT SELF ADAPTIVE CONTROL SYSTEMS
NT SEQUENTIAL CONTROL
A method for aiding human operator performance in a noncompensatory tracking task.
p0578 A73-10323
Method for quantitative estimation of the functional state of the motor apparatus
p0047 A73-13822
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
Some characteristics of pilot's performance under complicated flight conditions.
p0328 A73-36921
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004
Computer controlled automatic TV-microscope system for tracking and measuring nerve cell processes in designated axons and dendrites
p0359 A73-39763
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
Russian book - Psychological problems of activity regulation.
p0393 A73-41884
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892
Suboptimal sampling and control behavior of human operator in output prediction task for automatic process
p0598 N73-10114
Capability of training human to control and/or interact with complex electronic or mechanical systems [AD-746179] p0612 N73-11101
Periodic health examinations and automatic processing of medical histories for detection and prevention of human diseases
p0145 N73-17074
Automated procedures for Passive Immune Agglutination system [NASA-CR-128731] p0149 N73-17107
Automatic temperature control for liquid cooled space suit [NASA-CASE-ARC-10599-1] p0334 N73-26071
Design analysis for reversible, self adaptive manipulator control system
p0336 N73-26083
Error analysis on manipulator activation system using reversible self adaptive control mechanism
p0336 N73-26084
Ergonomic research and design principles for automatic control and man machine systems [NASA-TT-F-716] p0413 N73-30079

AUTOMATIC CONTROL VALVES
NT PRESSURE REGULATORS

AUTOMATIC DATA PROCESSING
U DATA PROCESSING

AUTOMATIC FLIGHT CONTROL
The problem of human efficiency in automated control systems
p0079 A73-16410

AUTOMATIC PATTERN RECOGNITION
U PATTERN RECOGNITION

AUTOMATIC ROCKET IMPACT PREDICTORS
U COMPUTERIZED SIMULATION
AUTOMATIC TEST EQUIPMENT
Automatic microscopy for mitotic cell location.
p0206 A73-27144
Management of NASA employee health problems by automated medical system
p0146 N73-17079
Automatic temperature controller for liquid cooled garment based on total evaporative water loss during exercise
[NASA-TM-D-7311] p0299 N73-25126
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] p0335 N73-26072
AUTOMOBILE ACCIDENTS
Decelerator sled simulation for testing air bag restraint system effects in passenger motor vehicle crash
[PB-212706] p0224 N73-20155
AUTOMOBILES
Driving speed in relation to interactions among automobile driver, roadway variables, and vehicle control
p0601 N73-10131
Double steering wheel forcing functions for estimating automobile driver manual control response
p0601 N73-10132
Acoustic measurement and recording system for noise generated by air bag automobile safety device
[AD-761836] p0370 N73-27977
AUTONOMIC NERVOUS SYSTEM
NT SYMPATHETIC NERVOUS SYSTEM
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
Hemocoagulation system function in mountain inhabitants and during altitude acclimatization, noting parasympathetic nervous system tonus
p0584 A73-11923
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
The role of vestibulometry in medical evaluation of flight personnel
p0165 A73-23821
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type'
p0362 A73-39797
Russian book - Role of the hypothalamus and the limbic system of the brain in regulating vegetative functions.
p0382 A73-40276
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
AUTONOMY
Ergatic modeling as dynamic goal-oriented physical process based on heuristic autonomous information-structured organization system with regulated model-human operator interaction
p0241 A73-29418
AUTOPSIES
Mid- and late changes in the QRS complex.
p0320 A73-36528
AUTOTROPHS
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
Biological mineralization products of human waste for autotroph cultivation
p0184 N73-19109
AVALANCHES
NT TOWNSEND AVALANCHE
AVIATORS
U AIRCRAFT PILOTS
AVIONICS
An instrument panel on an image tube in color
p0128 A73-21543
Human factors in design of avionics subsystems considering training costs and performance of Air Force personnel
[AD-759583] p0337 N73-26096
AVOIDANCE
NT COLLISION AVOIDANCE
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test
p0285 A73-33091
AXES (REFERENCE LINES)
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
AXONS
Structural characteristics of connections between medial efferent systems and spinal cord neurons
p0156 A73-22577
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569
AZO COMPOUNDS
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
AZOLES
NT INDOLES
NT PYRROLES
NT TRYPTOPHAN
AZULENE
Amino acids, urea, guanidine, glycocyamine, and 5-amino 4-imidazole carboxamidine from hydrolysis of azulmic acids
[NASA-TT-F-14640] p0070 N73-13089

B

BACILLUS
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107
Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores
p0291 N73-24108
Space flight ultraviolet irradiation effects on Bacillus thuringiensis toxin production capability
p0291 N73-24109
Thermal inactivation of Bacillus subtilis var. niger spores on Viking lander
[NASA-CR-133223] p0333 N73-26058
Dry heat inactivation of atypical Bacillus subtilis var. niger spores in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
Composition of human gastrointestinal microflora during prolonged isolation
p0373 N73-29037
BACK INJURIES
Aerodynamic pumping-caused spinal fractures in two pilots during high speed flight
p0586 A73-12154
Statistical analysis of occurrence of backache among Royal Air Force flight crews and ground crews to show effects of crew seats on physical comfort
[AD-745177] p0597 N73-10102

BACKGROUND NOISE
Binaural improvement in normal and defective ears in background of other voices
[AD-746101] p0597 N73-10103
Noise and response complexity effects on human attention and performance in visual perception task
[AD-747797] p0072 N73-13105
BACTERIA
NT BACILLUS
NT ESCHERICHIA
NT NITROBACTER
NT PSEUDOMONAS
NT STAPHYLOCOCCUS
NT STREPTOCOCCUS
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes.
p0579 A73-10625
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans.
p0045 A73-13598
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria.
p0117 A73-19483
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500
Survival of Arthrobacter crystallopoietes during prolonged periods of extreme desiccation.
p0119 A73-20026
Variable photosynthetic units, energy transfer and light-induced evolution of hydrogen in algae and bacteria.
p0130 A73-21685
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Heavy ion irradiation effects on bacteria mutations in balloon flight and accelerator experiments, comparing with cosmic rays
p0399 A73-42184
Daylight and disinfectant effects on bacteria survival times on plastic surfaces
[NASA-TT-F-13923] p0592 N73-10069
Growth response of bacteria and yeast in high pressure helium-oxygen environment
[AD-745334] p0596 N73-10096
Characteristics of photogenic bacteria - Micrococcus pierantonii
[NASA-TT-F-14439] p0608 N73-11072
Bacterial reduction of organically bound phosphoric acid in blood
[NASA-TT-F-14723] p0069 N73-13080
Planetary quarantine procedures for reduction of microbial burden on spacecraft
[NASA-CR-129793] p0070 N73-13086
Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[COO-3162-9] p0070 N73-13091
Differential light scattering patterns for identifying different species of bacteria
p0147 N73-17090
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Tape cassette bacteria detection system for automatic continuous bacterial detection for monitoring sterility of regenerated water in spacecraft
[NASA-CR-134035] p0417 N73-30996
BACTERICIDES
Bactericide activity of the integument of man at different times of the day
p0209 A73-27716
Antimicrobial water reclamation methods for processing human urine
p0183 N73-19105
Antimicrobial phenyl preparations for human urine conservation during space flight
p0184 N73-19112
Bactericidal activity of human skin at different times of day
p0218 N73-20110
Bactericidal properties of sorbents in spacecraft water regeneration system
p0374 N73-29038
BACTERIOLOGY
Resistance of soil microorganisms to starvation.
p0589 A73-12627
Automatic surface inoculation of agar trays.
p0155 A73-22550
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959
Development of procedures of identification of microorganisms on orbiting spacecraft
[NASA-CR-128747] p0186 N73-19132
Methods for improving bacterial transport media
[NASA-CR-128958] p0297 N73-25113
BAGS
NT GAS BAGS
BALANCE
Influence of man on biospheric balance
[JPRS-59366] p0339 N73-27065
BALLISTOCARDIOGRAPHY
Modification of a ballisto-oscillograph for extremities
p0157 A73-22865
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174
BANKING FLIGHT
U TURNING FLIGHT
BARANY CHAIR
Barany chair rotation for acceleration tolerance testing on flying personnel
p0254 N73-21995
BARDEEN APPROXIMATION
U SURFACE PROPERTIES
BAROMETRIC PRESSURE
U ATMOSPHERIC PRESSURE
BARORECEPTORS
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Circulatory reflexes from mechanoreceptors in the cardio-aortic area.
p0384 A73-40637
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits
p0403 A73-42681
Barotrauma mechanoreceptor reflex effects on animal respiratory and circulatory system
p0252 N73-21982

Evoked compensatory reflex reactions of rabbit ocular and eyelid muscles during hypoxia
p0253 N73-21992
BAROTRAUMA
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus hematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes.
p0330 A73-36934
Barotrauma in United States Air Force accidents/incidents.
p0387 A73-41160
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses
p0409 A73-43132
Effects of gastrointestinal pressure on rabbit eye nystagmus during barotrauma
p0253 N73-21983
Middle ear barotrauma effect on work capacity and flight fitness of flying personnel
p0254 N73-22000
BARRIER LAKES
U LAKES
BARYCENTER
U CENTER OF GRAVITY
BATHING
Design, fabrication and acceptance testing of zero gravity whole body shower
[NASA-CR-134066]
p0420 N73-31019
BATHS
Influence of immersion in temperature controlled bath on circulation and water balance in human body
[NASA-TT-P-14834]
p0185 N73-19124
BATS
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
BATTERIES
U ELECTRIC BATTERIES
BAYES THEOREM
Conjoint-measurement framework for the study of probabilistic information processing.
p0588 A73-12545
Bayesian model for stimuli processing in visual space perception
p0600 N73-10127
BAYESIAN STATISTICS
U BAYES THEOREM
BEACONS
NT RADIO DIRECTION FINDERS
BEAMS (RADIATION)
NT ION BEAMS
NT LIGHT BEAMS
BEAT
U SYNCHRONISM
BEAT FREQUENCIES
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies.
p0308 A73-34839
BED REST
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Prolonged bed rest and positive radial acceleration effects on human visual response time
[NASA-TN-D-7161]
p0107 N73-15117
Regulation of vertical posture after Soyuz 6, 7, and 8 flights and after 120-day bed rest experiment
p0134 N73-16052
Effect of atmosphere with increased oxygen and carbon dioxide content on human orthostatic tolerance following 10 days of bedrest
p0135 N73-16055
Effects of prolonged bed rest on body temperature and heart rate periodicity in man
p0175 N73-18113
Prolonged bed rest effects on human blood hormone level periodicities
p0175 N73-18114
Physiological stress effects of space flight on human body
[JPRS-57139]
p0254 N73-22002
Physiological effects of long term hypodynamic weightlessness simulation on humans
p0255 N73-22010
Human horizontal or antiorthostatic position effect in hypodynamic weightlessness test
p0255 N73-22011
Human regional blood circulation changes during bed rest experiment
p0255 N73-22012
Metabolic changes and cardiac output of humans in hypokinetic bed rest study
p0255 N73-22013
Visual acuity changes in humans during hypokinetic bed rest test
p0255 N73-22014
Functional reactions of human otorhinolaryngolic organs during hypokinesia
p0256 N73-22015
Human pulmonary volume decrease during long term bed rest
p0256 N73-22016
Weightlessness simulator for evaluating exercise effects in hypokinetic bed rest test
p0256 N73-22018
Exercise and muscle stimulation for preventing metabolism changes during bed rest
p0256 N73-22019
Changes in human cerebral circulation during prolonged bed rest test
p0256 N73-22020
Long term bed rest effects on human retinal blood circulation and intraocular pressure
p0263 N73-23038
Alterations in myocardial contractility induced by bed rest
[NASA-CR-128968]
p0333 N73-26056
Physiological motor function measurements for determining optimal bed rest periods
[NASA-TT-F-15144]
p0438 N73-32004
Physiological effects on highly trained subjects when confined to bed, deprived of sleep, or allowed to discontinue training
[NASA-CR-134044]
p0438 N73-32008
Fluid-electrolyte balance during 120-day bed rest
p0443 N73-33028
BEES
Bee image detection by ommatidium based on physical model using electromagnetic analysis of light absorption in photoreceptor
p0424 A73-43344
BEETLES
NT TRIBOLIA
BEHAVIOR
NT HUMAN BEHAVIOR
Inhibitive mechanisms activity in behavior control by neostriatum, discussing suppressive reactions, evoked sleep, conditioned and instrumental reflexes and neurophysiological aspects
p0581 A73-11025
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
Self-imposed timeouts under increasing response requirements.
p0170 A73-24625
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action

p0206 A73-27105
Frontal eye-field lesions in monkeys.
p0317 A73-36446
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Physiological study of dynamics and evolution of chimpanzee complex behavior, considering motor reactions, group behavior and nerve mechanisms of voluntary acts
p0426 A73-43928
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549
Mathematical models and physiological mechanisms of goal-directed behavior
[JPRS-60091] p0447 N73-33053
Theory of systems for effective behavior predictions
p0447 N73-33054
Approach to construction of formal model of behavior
p0447 N73-33055
One class of adaptive systems and results of computer modeling of their self instruction
p0447 N73-33056
Expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
Behavior of dogs when given choice of various reinforcements
p0449 N73-33066
Structure and functions of central mechanisms of reinforcement
p0449 N73-33067

BELL AIRCRAFT
NT UH-1 HELICOPTER
BELL MILITARY AIRCRAFT
U MILITARY AIRCRAFT
BENDS (PHYSIOLOGY)
U DECOMPRESSION SICKNESS
BERYLLIUM
Gas chromatographic analysis of beryllium in aqueous solutions and biological tissues
[AD-753112] p0177 N73-18131
BERYLLIUM ALLOYS
Toxicity and safety hazard of dry beryllium copper alloy machining for human operator
p0144 N73-17059
Health hazards in using electron beams for welding beryllium alloys
p0190 N73-19531
BERYLLIUM COMPOUNDS
NT BERYLLIUM OXIDES
BERYLLIUM OXIDES
Toxicological properties of rocket exhaust products and blood analysis for beryllium oxide content
[AD-754936] p0220 N73-20131
Physical and chemical characteristics, and biological activity of exhaust from beryllium-fueled motor
[AD-756531] p0259 N73-22042
BIAS
NT RESPONSE BIAS
BIBLIOGRAPHIES
Russian book - Biomedical problems of space flights: Index of domestic and foreign literature.
p0062 A73-16034
Annotated bibliography on reaction times in selected human information processing tasks
[AD-745416] p0596 N73-10095
Annotated bibliography with preliminary analysis on dysbaric osteonecrosis
[AD-747258] p0071 N73-13100
Bibliography on effects of underwater environment on tools, equipment, and human performance
[AD-748000] p0074 N73-13122
Human performance measurement - bibliographies
[AD-749100] p0100 N73-14080
Bibliography of research reports and publications issued by Human Engineering Division for April 1946 to December 1970
[AD-749933] p0103 N73-14103
Bibliography on radio frequency and microwave radiation effects in biological systems
[AD-750271] p0108 N73-15131
Bibliography on role of vestibular apparatus in compressed air work underwater
[AD-750686] p0109 N73-15133
Soviet bibliography on biocybernetics material received from Jan. to May 1972
[AD-750129] p0113 N73-15167
Bibliography of wildlife movements and tracking systems
[NASA-CR-130380] p0133 N73-16040
Bibliography on human factors in man machine interactions and systems design
[AD-752800] p0178 N73-18141
Bibliography on titanium toxicity in human and animal organisms
[ORNL-TIP/TIBC-72-65] p0186 N73-19135
Review of published bibliographical index of Soviet and foreign literature on biomedical problems in space
p0218 N73-20115
Bibliography of citations relating to planetary quarantine from 1966 to 1971
[NASA-CR-131889] p0258 N73-22038
Marine biology literature compilation for Caribbean Sea and adjacent regions
p0261 N73-23022
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023
Microbiological experiments aboard balloons, rockets, and earth satellites - literature review
p0262 N73-23025
Annotated bibliography and indexes on aerospace medicine and biology for 1961 to 1965
[NASA-TT-F-14662] p0265 N73-23053
Sixth supplement to bibliography on planetary quarantine with indexes
[NASA-CR-131817] p0297 N73-25112
Bibliography of anthropometric information for Air Force human factors engineering
[AD-762287] p0371 N73-27978
Bibliography of Russian literature on aviation and space medicine
[JPRS-53329] p0375 N73-29047
BICARBONATES
U CARBONATES
BICYCLE
Performance evaluation of training devices for developing human physical fitness
[NASA-CR-134046] p0440 N73-32023
BINARY CODES
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
Compact digital coding of electrocardiographic data.
p0097 A73-18815
Detection of informational constraints related to multi-variate visual displays.
p0240 A73-29185
BINARY SYSTEMS (DIGITAL)
U DIGITAL SYSTEMS
BINAURAL HEARING
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
Binaural interaction effects on afterperception of white noise pulse sequences delivered to both ears simultaneously or after various intervals
p0167 A73-24333
Problem of localization in the median plane - Effect of pinnae cavity occlusion.
p0193 A73-24976
Binaural acoustic field sampling, head movement and echo effect in auditory localization of sound sources position, distance and orientation
p0244 A73-30282
Vector correlation theory and neural mechanisms of binaural signal detection in human auditory system
p0244 A73-30283
Binaural signal detection - Equalization and cancellation theory.
p0244 A73-30284

Interaural difference thresholds in binaural perception of signals nonexistent in normal acoustic environment, considering beats, memory, learning, and stereophony p0244 A73-30285
Binaural improvement in normal and defective ears in background of other voices [AD-746101] p0597 N73-10103
Voice communication and hearing in acoustic orientation systems of animals at various evolution levels [DRIC-TRANS-3056] p0298 N73-25121

BINOCULAR VISION
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis. p0585 A73-12077
Tests for binocular rivalry of light contours for detection of randomness in disappearance patterns p0044 A73-13557
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection p0046 A73-13762
Study of variations of retinal disparities around the fixation point by the binocular vernier method in the foveal region p0046 A73-13763
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions p0046 A73-13764
Monocular and binocular clues interaction in depth perception and spatial orientation, discussing stereopsis testing p0079 A73-16483
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception p0121 A73-20262
Eye dominance measurement relationship to image sharpness or visual acuity from binocular and monocular tests, obtaining dominance normal distribution p0153 A73-21893
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex p0167 A73-24332
Binocular rivalry and binocular fusion of after-images. p0200 A73-26200
Scalar perceptions with binocular cues of distance. p0235 A73-28176
Monocular contribution to binocular vision in normals and amblyopes. p0237 A73-28359
The Mach-Dvorak phenomenon and binocular fusion of moving stimuli. p0245 A73-30392
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia p0275 A73-30999
Stereoscopic depth aftereffects with random-dot patterns. p0308 A73-34841
Extended border enhancement during intermittent illumination - Binocular effects. p0308 A73-34842
Amplitude of visual suppression during the control of binocular rivalry. p0311 A73-35491
Supranuclear structures regulating binocular eye and head movements. p0317 A73-36451
Binocular vision variation with age in flight crews p0329 A73-36928
Non-linearity of visual signals in relation to shape-sensitive adaptation responses. p0346 A73-37418
Disparity detectors in human depth perception - Evidence for directional selectivity. p0383 A73-40413
The psychophysical inquiry into binocular summation. p0388 A73-41187
Psycho-visual problems associated with monocular, bi-ocular, and binocular visual systems [AD-749450] p0101 N73-14085

BIOACOUSTICS
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity p0244 A73-30279
Binaural signal detection - Equalization and cancellation theory. p0244 A73-30284
Action of stable and pulsed noise on the processes of skeletal muscle excitation p0402 A73-42662
Orbit and superior orbital fissure acoustic window for cranium posterior structures imaging by echoencephalographic techniques p0402 A73-42667
Simple simulated human head for checking echoencephalographic equipment. p0403 A73-42672
Signal processing in medical technology p0424 A73-43317
Voice and hearing in system of acoustic orientation of animals [NLL-DRIC-TRANS-3056-(3623.66)] p0291 N73-24101

BIOASSAY
The study of biological macromolecules using perturbed angular correlations of gamma radiation. p0589 A73-12648
Twin spectrograph measurements at 2520-3375 A of metal trace elements in biological sample solutions p0088 A73-17692
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique p0153 A73-21871
Study of myocardial antigen localization using the immunofluorescence method p0278 A73-31392
Bioassay method for thermal protective clothing fabrics evaluation, measuring skin damage with various fabric combinations under exposure to calibrated flame source p0285 A73-32671
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet. p0355 A73-39103
Effect of training with eccentric muscle contractions on skeletal muscle metabolites. p0390 A73-41523
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques. p0391 A73-41637
Procedure for assaying enzyme activity in soils and application to presumptive life tests in Martian soil [NASA-CR-128399] p0591 N73-10059
Soil sampling and microorganism analysis in planetary spacecraft assembly area for prevention of Mars contamination [NASA-CR-130009] p0135 N73-16059
Animal species susceptibility to toxic effects of long term exposure to environmental monomethylhydrazine [AD-751441] p0139 N73-16086
Risk scoring system for identifying subjects with high risk to coronary heart disease p0146 N73-17080
Microbiological assay procedures for spacecraft cabling, antennas, solar panels, and thermal blankets [NASA-CR-130383] p0149 N73-17109
Luciferase ATP assay procedure for determining bacterial infections in urinary tract [NASA-CR-130797] p0173 N73-18096
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators p0174 N73-18111
Multiple immunoassay system for determining parathyroid hormone, calcitonin, and vitamin D in human blood p0174 N73-18112

Potassium ferrioxalate actinometric measurements of solar ultraviolet photobiological energy
p0292 N73-24113
Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Analytical gas chromatography and mass spectrography for physiological monitoring of astronauts
[NASA-CR-133272] p0338 N73-27059
Biodetection grinder for sampling aerospace materials for microorganisms
[NASA-TM-X-64765] p0376 N73-29059
Fluorometric 11-hydroxycorticosteroid determination in human blood plasma
[NASA-TT-F-15092] p0416 N73-30990

BIOASTRONAUTICS
Space environment effects on human life and biochemical evolution study in aerospace medicine and biology, noting amino acid molecules synthesis
p0056 A73-14589
Russian book - Biomedical problems of space flights: Index of domestic and foreign literature.
p0062 A73-16034
Microflora of a sealed cabin with human subjects in a 3-day experiment with reduced temperature and high relative humidity
p0088 A73-17697
Astronauts diurnal life cycle inversion during space flight missions, considering social factors and work-rest cycle effects
p0208 A73-27715
Aerospace medicine session concerning aviation and space physiology and psychology
p0445 N73-33037

BIOCHEMISTRY
NT BACTERIOLOGY
NT BIOGEOCHEMISTRY
NT ENZYMOLOGY
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor F from reticulocytes in the respiratory chain
p0588 A73-12510
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319
Biological, chemical and cytological methods of microorganism detection integrated into single instrument
p0056 A73-14320
Circadian rhythms - Subcellular and biochemical aspects.
p0089 A73-17824
Book - Molecular evolution: Prebiological and biological.
p0089 A73-17926
Life origin on earth, considering hydrocarbon molecules and macromolecular synthesis under earth atmospheric evolutionary conditions
p0089 A73-17928
Model experiments on the prebiological formation of protein.
p0090 A73-17938
Modified rhodopsin in the pigment epithelium.
p0121 A73-20263
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatigue
p0278 A73-31393
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
Extraterrestrial life existence evidence, discussing biochemical properties, evolution and mental and moral characteristics of extraterrestrial life
p0312 A73-35657
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483
Continual mechanochemical model of muscular tissue
p0381 A73-40182
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Procedure for assaying enzyme activity in soils and application to presumptive life tests in Martian soil
[NASA-CR-128399] p0591 N73-10059
Oxygen redox processes in blood coagulation mechanism
p0063 N73-12079
Spectrometric determination of copper, iron, cobalt, nickel, and manganese complexes in biological samples
p0256 N73-22022

BIOCLIMATOLOGY
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861
The combined influence of microwave radiation and an adverse climate on the organism
p0277 A73-31170

BIOCONTROL SYSTEMS
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
Functional models adequacy for brain activity simulation, discussing transfer, forward and feedback loops, hierarchy, reciprocity and self organizing aspects
p0579 A73-10651
Neuron networks modeling from viewpoint of intracellular and cell-medium interaction, discussing coding properties and nonsingular self adjusting system response
p0579 A73-10652
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
Certain aspects of the bionic analysis and control of dynamic systems
p0580 A73-10658
Inhibitive mechanisms activity in behavior control by neostriatum, discussing suppressive reactions, evoked sleep, conditioned and instrumental reflexes and neurophysiological aspects
p0581 A73-11025
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude.
p0042 A73-13500
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
Biological role of atmospheric oxygen in the mechanism of blood coagulation

p0087 A73-17678
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
Biological clocks in animal orientation and in other functions.
p0089 A73-17825
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337
The control of sensitivity in the retina.
p0097 A73-18673
Ergatic organism defined as multipurpose nonautonomous control system with homeostasis with respect to functional operations conservation
p0119 A73-20048
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
Digital computer studies of respiratory control.
p0123 A73-20577
Renal component of the antigravitation function of the organism
p0123 A73-20976
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677
Formalization of an arterial pressure stabilization system
p0168 A73-24467
Voluntary activation of individual motor units in man
p0168 A73-24519
Controlled tachycardia through voluntary change in exercise regime, investigating relation between heart rate and blood circulation
p0169 A73-24521
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
Motor functions and control of sensorial messages of somatic origin
p0240 A73-29174
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers
p0242 A73-29875
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
Saccadic eye movement control system, investigating response characteristics to variously timed pulse stimuli
p0245 A73-30389
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark.
p0245 A73-30390
Voluntary small saccadic eye movements in presence of stationary visible target, considering scanning function of fixation saccades
p0246 A73-30394
Blood pressure and body temperature dynamic control systems and respiration relationship to heart rate variability
p0250 A73-30878
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Intervention of cerebello-cortical and cortico-cerebellar paths in the organization and regulation of movement
p0282 A73-32288
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357
Book - Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576
The explanation and investigation of biological rhythms.
p0286 A73-33155
Amplitude of visual suppression during the control of binocular rivalry.
p0311 A73-35491
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
The control of eye movements in the saccadic system.
p0317 A73-36453
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills
p0344 A73-37328
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
Model of evaporation responses to heat load increases
p0352 A73-38150
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004
Mathematical analysis of the operation of regulatory mechanisms of the spinal cord
p0354 A73-39005
Russian book - Role of the hypothalamus and the limbic system of the brain in regulating vegetative functions.
p0382 A73-40276
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Control of the duration of expiration.
p0391 A73-41635
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
The effect of anxiety control on the level of information processing
p0425 A73-43848
Neurogenic and local regulation of resistance and capacitance blood vessels, noting sympathetic nervous system influence on musculocutaneous and splanchnic regions
p0426 A73-43927

BIODYNAMICS
Some biomechanical properties of the pelvic girdle of man
p0045 A73-13743
German monograph - Experimental investigation of the structure of joint movements in the range of motions of the arms and of the entire body, giving attention to a presentation in a man-related basic system.

p0047 A73-13812
Book - How man moves: Kinesiological studies and methods.
p0048 A73-13993
Telemetry methods for maximum static muscle strength measurements, considering dynamic force measurement possibilities
p0054 A73-14296
Finite element displacement analysis of a lung.
p0056 A73-14661
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system.
p0078 A73-16249
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471
Human tendon stress recovery after load removal as function of time, sex, age and side differences
p0119 A73-20033
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
Analysis of swimming motions.
p0194 A73-25184
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129
Book - Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization.
p0287 A73-33161
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428
Endolymph fluid mechanics in semicircular canals approximated by rigid torus filled with incompressible Newtonian fluid
p0315 A73-36430
Three models of the vibrating ulna.
p0347 A73-37543
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106
Volume-pressure characteristics of rib cage-diaphragm interaction in standing subjects during voluntary relaxation
p0359 A73-39778
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Biomechanics of locomotion via jumping on lunar surface, discussing subgravity effects on energy requirements, body potential and kinetic energy, muscular work, etc
p0397 A73-42175
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418
Reflex arch lability in rabbits at synchronous maximum frequency of electromyographic and muscle stretching vibration measurement
p0401 A73-42659
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926
Vertical arm reaching movements for various gravitational levels, measuring reach time and angular and lower arm velocities
p0424 A73-43218
Evaluation of the physical conditions of individual airmen
p0425 A73-43790
Physiological study of dynamics and evolution of chimpanzee complex behavior, considering motor reactions, group behavior and nerve mechanisms of voluntary acts
p0426 A73-43928
Sentography - Dynamic forms of communication of emotion and qualities.
p0427 A73-44180
Physical model selection for the balance preservation system in man
p0431 A73-44903
Dynamics of the balance preservation system of man
p0432 A73-44909
Conference on operational flight stress effects on human biodynamics and performance
[AGARD-CP-101] p0188 N73-19143
Combined stress effects in human communication and motion sickness biodynamics
p0188 N73-19144
Construction of remote controlled mechanical manipulators using biodynamic principles
[NASA-TT-F-14889] p0232 N73-21152

BIOELECTRIC POTENTIAL

Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
ERG late photoreceptor potential components time course in macaque monkey cones and rods, noting pure cone foveal response
p0046 A73-13761
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
Mathematical analysis of body surface potentials.
p0059 A73-15646
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004
Physiological mechanisms of evoked-potential habituation in the visual analysor
p0119 A73-20006

German monograph - The objectivization of the effect of load and stress on an information-reception process of man with the aid of acoustically evoked potentials.
p0122 A73-20389
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579
Biopotential alpha and theta rhythms of neocortex and hippocampus of milk drinking cats after food and water deprivation
p0157 A73-22862
Light evoked changes in potential difference between inside and outside of cells in Limulus ommatidia, describing multistage model of generator potential
p0160 A73-23309
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
Correlation analysis of the bioelectrical activity of the brain during mental work
p0163 A73-23678
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
Sinusoidal stimuli induced electrical activity of hippocampus in waking rhesus monkeys and baboons
p0167 A73-24330
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex
p0167 A73-24332
Cardiac potential measuring and recording instrument with 240 probes, presenting circuit and block diagrams
p0167 A73-24422
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
Amplitude discriminator with variable effective range design for use with/without digital computer in neuron pulsed activity analysis
p0168 A73-24516
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Memory process in terms of cortex-subcortex interrelation, brain lability level and biopotential trace processes
p0194 A73-25198
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells
p0197 A73-25591
Neurogenic and myogenic mechanisms of myocardium cell electrical activity and excitation in vertebrate and invertebrate neural and muscle tissues
p0198 A73-25599
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Comparative analysis of the electrical activity of the cortex and of cerebral subcortical formations in the process of the alteration of conditioned reactions
p0205 A73-27104
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105
Heart function mechanism explanation by activation potential stimulation of muscular contraction via calcium ions
p0207 A73-27690
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Light adaptation of the late receptor potential in the cat retina.
p0236 A73-28352
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Evoked potentials to changes in the chromatic contrast and luminance contrast of checkerboard stimulus patterns.
p0236 A73-28355
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357
Motor functions and control of sensorial messages of somatic origin
p0240 A73-29174
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity
p0242 A73-29990
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
German monograph - Comparative investigations regarding the phenomenon of force potentiation in the case of the heart muscle of cold-blooded and warm-blooded animals.
p0249 A73-30669
Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825
Subjective brightness contrast lack of correlation with steady state evoked potential amplitude in suprathreshold stimuli range
p0275 A73-31017
Evoked negative electrical potentials due to auditory zone stimulation by local cooling, mechanical trauma and potential recording, observing reaction regeneration variations
p0276 A73-31159
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts

and their detection on the body surface.
p0319 A73-36518
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911
Monkey rod receptor potential suppression at photopic stimulus intensities by neurophysiological inhibitory mechanism for clearing cone initiated visual pathway
p0345 A73-37412
Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation.
p0346 A73-37413
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943
Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Role of associations in the formation of evoked potentials from the human cerebral cortex
p0362 A73-39798
A universal preamplifier for bioelectric signals
p0383 A73-40345
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
Individual physiological differences in evoked potential reactions to light sources, discussing latent periods, potential amplitude distribution and EEG measurement techniques
p0393 A73-41888
Operator reaction functional readiness manifestation in evoked potential characteristics of stimulus-response situations, obtaining response amplitude distribution
p0394 A73-41891
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372
Russian book - Integral topograms of heart potentials.
p0401 A73-42489
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents
p0401 A73-42652
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926
Electrical field distribution in the human body.
p0427 A73-44216
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio
p0434 A73-45159
Visual evoked potentials to changes in the motion of a patterned field.
p0435 A73-45167
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
Electrophysiological sleep patterns of human and animal brains
[NASA-TT-F-740] p0257 N73-22023
Bioelectrical activity differentiations in cat cortex during sleep inhibition
p0257 N73-22026
Interdependence of slow and rapid brain waves during sleep
p0257 N73-22027
Neuronal changes in cortical motor region cells during pharmacological induced sleep
p0257 N73-22028
Somnofunctional mapping of deep brain waves in neurological patients
p0257 N73-22029
Thalamic cat cell activities during sleep and wakefulness phases
p0257 N73-22030
Bioelectric activity and excitability of cat brain structures during sleep phases
p0257 N73-22031
Bioelectric activity changes in brains of sleeping children caused by aging factor
p0257 N73-22032
Centripetal acceleration for inhibiting cerebellar rat cortex activity
p0262 N73-23030
Comparison of electroencephalographic response patterns in man and monkeys to visually evoked cortical stimuli
[IZP-1972-24] p0264 N73-23049
Effects of phosdrin on electrical brain potentials in squirrel monkeys
[FAA-AM-73-3] p0338 N73-27056
Influence of N-type sound wave pressure rise time on guinea pig cochlear and acoustically evoked potentials
[ISL-31/72] p0365 N73-27940

BIOELECTRICITY
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152

Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
Computerized correlation analysis of single and multiple neuron pulse activity, considering temporal, sequential and entropy characteristics
p0579 A73-10653
Complex processing of discrete biological information
p0580 A73-10662
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area
p0583 A73-11503
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator
p0588 A73-12557
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation
p0046 A73-13786
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements
p0060 A73-15787
Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Space-time dynamics of the impulse activity in human-brain neuron populations
p0080 A73-16692
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion
p0080 A73-16696
Responses of bulbar respiratory neurons to apparatus-aided artificial respiration
p0081 A73-16699
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles
p0084 A73-16735
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
Rabbit hippocampal neuron activity relation to theta-wave phases from cell potential and extracellular recording analyses
p0118 A73-20005
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Modification and updating of the bioelectric DS2C amplifier for a PET input.
p0159 A73-22936
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802
Role of the medial area of the medulla oblongata in the rhythmical activity of respiratory-center neurons
p0164 A73-23804
Neuron analyzer technique for poststimulus histogram plotting of neuron excitation as function of stimulus onset time
p0165 A73-23811
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937
Origin of the external electric field detected near animals and men
p0166 A73-23942
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint
p0166 A73-23943
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors
p0199 A73-26086
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
Oscillatory waves in intraretinally recorded electroretinograms in primates, considering electrode depth, stimulus duration and intensity and background illumination, anesthesia and tetrodotoxin effects
p0245 A73-30393
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Effects of vagotomy on the impulse activity of respiratory neurons
p0276 A73-31160
Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
The neuronal mechanism of nystagmus.
p0316 A73-36437
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type'
p0362 A73-39797
Functional properties of auditory cortex neurons in a controlled experiment
p0362 A73-39802
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus
p0362 A73-39803
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277
Correlative function formalism for neuron networks with limited communication channels and active-refractive-storing signal action
p0389 A73-41277
Russian book - Electrical activity of the human brain in the process of motor action.
p0389 A73-41289
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man
p0401 A73-42656
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664
Computer acquisition of multiunit nerve-spike signals.
p0403 A73-42671
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits
p0403 A73-42681
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Mechanical response of otolith-dependent units of cats to sinusoidal linear acceleration
[AMRU-R-69-3] p0608 N73-11068
Neuroelectric oscillation in two parallel, single-unit pathways feeding back on single primary cell
[R-984-RC] p0070 N73-13083
Change in impulse activity of neurons in respiratory center during electric stimulation of vestibular nerve and dorsal roots in spinal cord
p0442 N73-33017
State of blood filling and bioelectric activity of brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic vascular dysfunction
p0443 N73-33027

BIOENGINEERING
NT ANTHROPOMETRY
NT BALLISTOCARDIOGRAPHY
NT BIOINSTRUMENTATION
NT BIOMETRICS
NT BIOTELEMETRY
NT BODY MEASUREMENT (BIOLOGY)
NT CARDIOGRAPHY
NT ELECTROCARDIOGRAPHY
NT ELECTROENCEPHALOGRAPHY
NT ELECTROMYOGRAPHY
NT ELECTROPLETHYSMOGRAPHY
NT ELECTRORETINOGRAPHY
NT PLETHYSMOGRAPHY
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
Power sources and requirements for human artificial hearts
[COO-2155-4] p0102 N73-14095
Design and development of biomedical prosthetic and electronic devices
[NASA-CR-130022] p0140 N73-16093
Electrocutaneous parameters for designing dynamic tactual communication system
p0230 N73-21135
Design of hemoglobin tester, flow ventilation systems, blood viscometer, isotope handling equipment, and blood pressure measuring device
[NASA-TM-X-66214] p0231 N73-21139
Safe handling system for iridium isotopes used in radiation therapy
p0231 N73-21143
Bioelectric monitoring and motion picture surveying for improved physical training of astronauts
p0263 N73-23039
Biological development of human living environment
[NASA-TT-F-15005] p0339 N73-27067
Interaction concept for improving efficiency of man machine systems
[JPRS-59149] p0340 N73-27070

BIOGENESIS
U BIOLOGICAL EVOLUTION

BIOGENY
The role of biogenic amines in sleep.
p0051 A73-14260
Silk fibroin, collagen, glycoproteins, keratin and protamines formation in single evolutionary event by de novo synthesis of DNA
p0116 A73-19219
Lifes possible origin on earth from extraterrestrial organisms, discussing galactic intelligent life and intelligent signals from extrasolar planets
p0387 A73-41175

BIOGEOCHEMISTRY
Biogeochemistry of aragonite mud and oolites.
p0056 A73-14662
Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping
p0095 A73-18417
Chemical evolution - Recent syntheses of bioorganic molecules.
p0202 A73-26477
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples.
p0202 A73-26481

BIOINSTRUMENTATION
NT BIOTELEMETRY
A linear motion generator for physiological research.
p0577 A73-10173
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
Application of frequency discrimination technique to the analysis of electroencephalographic signals.
p0057 A73-15052
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992

Three channel transistorized pulse generator for electric stimuli used in electrophysiological studies p0084 A73-16739
Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics p0096 A73-18474
Linearity of the horizontal component of the electro-oculogram. p0115 A73-19125
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system. p0117 A73-19482
A respirometer for the continuous measurement of respiration volume with remote transmission p0119 A73-20035
A method for chronocyclographical motion analysis with the aid of an on-line computer p0119 A73-20036
Method for measuring the contractions of small hearts in organ culture. p0125 A73-21218
A method for electrocardiogram recording in Rhesus monkeys p0126 A73-21324
Heated Fleisch pneumotachometer - A calibration procedure. p0127 A73-21509
An implantable glass electrode used for pH measurement in working skeletal muscle. p0127 A73-21510
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain p0157 A73-22857
Modification of a ballisto-oscillograph for extremities p0157 A73-22865
Electrical operational and pneumatic /variometer/ differentiation recording of displaced volume derivative from pneumotachograph in spontaneous breathing p0159 A73-22937
The electroretinogram, as analyzed by microelectrode studies. p0162 A73-23318
Electromagnetic 60 Hz interference in ECG recordings, discussing sources, identifying tests, elimination and ECG amplifier design p0163 A73-23648
An IC piezoresistive pressure sensor for biomedical instrumentation. p0163 A73-23649
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity p0166 A73-23849
Cardiac potential measuring and recording instrument with 240 probes, presenting circuit and block diagrams p0167 A73-24422
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach. p0196 A73-25342
Implantable transducer for in vivo measurement of bone strain. p0206 A73-27443
Decatron indicator for a micromanipulator controlled by a stepping motor p0250 A73-30850
Procedure for recording the rate of pressure changes in heart cavities p0276 A73-31167
Technique for measuring the vessel blood pressure in long continued experiments p0279 A73-31394
The application of aerospace technology to patient monitoring. p0285 A73-32804
Book - Biomedical instrumentation and measurements. p0312 A73-35860
Techniques for microinjection of biologically active substances into subcortical structures of the brain p0322 A73-36574
Measurement of cardiac output with and organ trapping of radioactive microspheres. p0324 A73-36661
Hybrid biological power cells for cardiac pacemakers - Materials evaluation. p0363 A73-39823
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers. p0363 A73-39824
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions p0395 A73-42055
An assembly for electrophysiological and thermometric studies p0402 A73-42663
Measuring characteristics of the displacement cardiograph. p0403 A73-42676
A simple cardiac contractility computer. p0403 A73-42677
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories. p0403 A73-42678
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits p0403 A73-42681
Design and attachment of skin electrodes in human cardiac monitoring during space flight p0065 N73-12095
Applications of aerospace technology to biomedical research [NASA-CR-129588] p0068 N73-13071
Obtaining stable oxygen electrodes by coating with plasma catalyzed polymer film [AD-748422] p0074 N73-13120
Biodetection grinder for sampling aerospace materials for microorganisms [NASA-TM-X-64765] p0376 N73-29059
Instrument for measurement of postural equilibrium in human beings [AD-763096] p0377 N73-29067
NASA bioinstrumentation list for public utilization [NASA-SP-5958(01)] p0438 N73-32007

BIOLOGICAL ACTIVITY
U ACTIVITY (BIOLOGY)
BIOLOGICAL ANALISIS
U BIOASSAY
BIOLOGICAL CELLS
U CELLS (BIOLOGY)
BIOLOGICAL CLOCKS
U RHYTHM (BIOLOGY)
BIOLOGICAL EFFECTS
NT RELATIVE BIOLOGICAL EFFECTIVENESS (RBE)

Russian monograph on radioactive isotopes effects on organisms covering metabolism, elimination, acceleration methods, pathogenesis and treatment of damage, toxicity, biological action, etc p0590 A73-12865
Pathomorphological and histochemical analysis of Luna 16 fine lunar soil fraction biological effect on mice p0056 A73-14569
Russian book on radiation genetics of microorganisms covering lethal and mutagenic action of radiation on fungi, microscopic algae, bacteria and viruses p0060 A73-15701
Effect of lunar soil on radiation injuries in mice. p0077 A73-16090
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats p0086 A73-17676
Biological role of atmospheric oxygen in the mechanism of blood coagulation p0087 A73-17678
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man. p0092 A73-18033
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation p0123 A73-20981

Biological effects of lasting hypodynamia on young albino rats in 62 day confinement, considering weight, growth and sexual behavior
p0124 A73-20983
A method for studying the action of high-intensity electric fields on microorganisms
p0167 A73-24419
Gravitational effects on biological systems in terms of animal body size, age, sex and posture as factors affecting acceleration tolerance
p0197 A73-25573
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes
p0202 A73-26482
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Mammalian tissue response to subcutaneous and intraperitoneal injection of aqueous suspensions of lunar fine material, noting insolubility in tissue and irritant action
p0203 A73-26484
Plant growth response to low temperature and UV treatment, discussing chlorophyll synthesis, carbohydrate levels, ion balance and enzyme characteristics
p0203 A73-26486
Results and prospects of microbiological studies in outer space.
p0203 A73-26487
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
Book - An introduction to radiation protection.
p0205 A73-27048
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499
Overview of the biological effects of electromagnetic radiation.
p0240 A73-29211
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650
Parachutist biomedical effects during 110-175 knot towing by aircraft, establishing maximum feasible airspeed
p0285 A73-32675
Biophysical hazards of microwave radiation.
p0285 A73-32723
Biological indicators and the effectiveness of sterilization procedures.
p0288 A73-33692
Formaldehyde gas as a sterilant.
p0288 A73-33694
Russian book - Primary and initial processes of the biological action of radiation.
p0312 A73-35896
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Ten years of development of the Planetary Quarantine Program of the United States.
p0313 A73-35966
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483
The effect of immobilization on body fluid volume in the rat.
p0358 A73-39487
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972.
p0395 A73-42158
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments
p0397 A73-42172
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds
p0399 A73-42185
Reactions of living organisms to the action of electromagnetic waves in the millimeter range
p0426 A73-44094
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
Research on biological effects of microwave radiation
[MBL-1972-5] p0591 N73-10060
Biological effectiveness of microwave field and human tolerance
[JPRS-57209] p0593 N73-10073
Exposure distributions for air travelers and radiation workers at 0.54 millirem/year
[AD-743482] p0594 N73-10083
Theoretical study of biological hazards from exposure to ELF electrical fields and potentials
[AD-743480] p0595 N73-10093
Human and animal studies on both ionizing and nonionizing radiations
[PB-210613] p0596 N73-10099
Effects of whole body exposure to external radiations, using animal studies applied to man
[CONF-720108-2] p0066 N73-12102
Conference on biological effects of magnetic fields
[NRC-TT-1545] p0099 N73-14070
Effects of alterations in barometric pressure on humans
p0104 N73-15092
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars
[NASA-TM-X-2714] p0107 N73-15118
Biosatellite 2 experiments for determining effects of prolonged weightlessness on biological processes
[CONF-720441-1] p0107 N73-15119
Biological effects of microwave irradiation on humans - literature review
[UR-3490-29] p0107 N73-15120

Bibliography on radio frequency and microwave radiation effects in biological systems
[AD-750271] p0108 N73-15131
Physiology of depressed metabolic states and gastrointestinal responses to ionizing radiation
[NASA-CR-130381] p0133 N73-16038
Effect of prolonged hypodynamia on rat biology
p0134 N73-16050
Abstracts on radiation and health physics
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069
Mortality and blood cell count variation in mice after irradiation with fast neutrons and X rays
[BMVG-FBWT-72-16] p0138 N73-16077
Influence of 100 percent anhydrous ammonia environment on body functions
p0147 N73-17088
Occupational hazards and adverse biological effects of ultraviolet radiation
p0148 N73-17094
Aerospace medicine for treating abnormal conditions caused by space flight
[NASA-TT-F-735] p0175 N73-18116
Monte Carlo radiation transport computer codes for calculating dose distributions and cell survival probabilities
[NASA-CR-130965] p0176 N73-18127
Influence of light flashes from heavy ionizing particles on astronaut nervous system
[LBL-1011] p0186 N73-19134
Biological and toxicity effects of aluminum and other chemicals in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136
Research in space biology and medicine
[JPRS-58620] p0216 N73-20094
Effect of chronic irradiation of dogs by Co60 gamma rays on level of autoantibodies
p0216 N73-20100
Effect of sonic boom on fish and fish eggs during developmental stage
[FAA-RD-73-29] p0219 N73-20121
Review of bibliography on medical and biological research during space flights
p0224 N73-21091
Drug effects on vision of flying personnel
p0228 N73-21121
Comparison of alcohol and diazepam effects on human mental and psychomotor functions
p0229 N73-21126
Apollo 16 experiment using biostack to determine effects of heavy nuclei on biological organisms
p0232 N73-21761
Physical and chemical characteristics, and biological activity of exhaust from beryllium-fueled motor
[AD-756531] p0259 N73-22042
Annotated bibliography and indexes on aerospace medicine and biology for 1961 to 1965
[NASA-TT-F-14662] p0265 N73-23053
Biological effects of sleep deprivation, and effects of prolonged work on performance under combat conditions
p0271 N73-23989
Wing anomalies as result of weightlessness simulation for flour beetle Tribolium confusum
p0367 N73-27952
Influence of continuous and discontinuous exposure to carbon monoxide on animals
p0442 N73-33019
Biological evaluation of influence of helium-oxygen atmosphere on culture of mammalian cells
p0443 N73-33024

BIOLOGICAL EVOLUTION
NT ABIOGENESIS
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033
Book - Molecular evolution: Prebiological and biological.
p0089 A73-17926
The origin of life problem - A brief critique.
p0089 A73-17927
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus
p0090 A73-17929
Informational biopolymer structure in early living forms.
p0090 A73-17946
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
Ribosomal RNA base composition and molecular evolution in plants and animals of various taxonomic groups
p0116 A73-19220
Electrophysiological investigation of suprasegmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics
p0118 A73-20001
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products.
p0202 A73-26479
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490
The evolution of lignin - Experiments and observations.
p0241 A73-29649
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723
Relationship of theoretical physics to molecular biology, considering synthesis, ontogenesis, phylogenesis, evolution models, thermodynamic applications and Eugen prebiological evolution theory
p0281 A73-31823
Self organized biological systems analysis, including deterministic and phenomenological selection theories, molecular level cell instructive properties and self reproducing hypercycles
p0281 A73-31825
Extraterrestrial life existence evidence, discussing biochemical properties, evolution and mental and moral characteristics of extraterrestrial life
p0312 A73-35657
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
Biodegradation from evolution viewpoint as physiological function and fundamental cellular process regulating biological equilibrium, explained by intracellular digestion and phagocytic cells association
p0385 A73-41024
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080

Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns p0406 A73-42859
Primitive mammals phylogeny relationship to homeothermic abilities, discussing body temperature, thermoregulation, basal metabolism rates, hibernation, nychthemeral rhythms and responses to heat and cold p0406 A73-42860
Thermoregulation evolution in various animals, discussing body size and composition effects, body temperature variations, control mechanisms, heat loss and production, behavior and ontogeny p0406 A73-42863
Directed Panspermia theory of terrestrial bioevolution, suggesting microorganism transmission to earth by intelligent technologically advanced civilization via spacecraft p0428 A73-44553
Biostatistics of genetical processes in human populations [NASA-CR-131508] p0229 N73-21131
Handbook on structural evolution of vestibular apparatus p0264 N73-23044
State and prospects of biogeocenological research [JPRS-59395] p0338 N73-27053
Search for biological life forms on Mars and other planets p0416 N73-30985

BIOLOGICAL MODELS
U BIONICS
BIOLOGICAL RHYTHM
U RHYTHM (BIOLOGY)
BIOLOGY
Research in aerospace, biological, and solar sciences [AD-746143] p0609 N73-11080
Bibliography of wildlife movements and tracking systems [NASA-CR-130380] p0133 N73-16040
Applications of aerospace technology in biology and medicine [NASA-CR-130544] p0142 N73-17047

BIOLUMINESCENCE
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method. p0054 A73-14304
Characteristics of photogenic bacteria - Micrococcus pierantonii [NASA-TT-F-14439] p0608 N73-11072
Photometric observations of in situ fluorescence and bioluminescence with Biota in New York Bight [RM-568J] p0252 N73-21978
NASA supported research in photobiology and photochemistry from 1966 to 1973 [NASA-CR-133459] p0365 N73-27937

BIOMECHANICS
U BIODYNAMICS

BIOMEDICAL DATA
Automated system of storing and processing vectorcardiograms p0580 A73-10660
Complex processing of discrete biological information p0580 A73-10662
Computation of solutions to the inverse problem of electrocardiography. p0582 A73-11465
Vector summation dial for analysis of time-nonstationary cyclic biological data, applying to peak time change detection and random walks p0049 A73-14120
A programmable four channel system for long-time radio telemetry of biomedical parameters. p0052 A73-14280
Surgically implanted single and multichannel telemetry systems for monitoring single and multiple physiological parameters, discussing size and power requirements p0054 A73-14302
Miniature biotelemeter giving 10 channels of wideband biomedical data. p0058 A73-15388
The transmission of low frequency medical data using delta modulation techniques. p0058 A73-15408
Emotional stresses during a space flight p0116 A73-19297
USAF WAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system p0155 A73-22539
The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information. p0207 A73-27646
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal p0245 A73-30387
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction. p0286 A73-33115
Pilot workload immediate, duty day and long term period evaluation from heart rate, subjective, psychological, biochemical stress and sleep pattern measurements p0347 A73-37734
Interactive information system with application in medical area [NASA-TM-X-66076] p0604 N73-10156
Neurophysiology and dynamic response of vestibular system to angular and linear acceleration [DR-215] p0606 N73-11057
Influence of 45 to 60 day space flight on physiological functions of human body [NASA-CR-129131] p0609 N73-11074
Technology utilization in biomedical areas for November 1972 [NASA-CR-129998] p0109 N73-15135
Utilization of aerospace technology in biomedical field - Southwest Research Institute report for Jan. 1973 [NASA-CR-130984] p0173 N73-18097
Technology transfer of biomedical data for use in research of cardiovascular diseases [NASA-CR-131246] p0211 N73-20053
Review of published bibliographical index of Soviet and foreign literature on biomedical problems in space p0218 N73-20115
Application of systems analysis techniques to improve management controls within biomedical research programs [NBS-TN-761] p0252 N73-21977
Physical and biomedical research by earth orbiting space stations [AD-756771] p0294 N73-24126
Space biology, space medicine, and human physiology [NASA-TT-F-14964] p0298 N73-25116

BIOMETEOROLOGY
U BIOCLIMATOLOGY
BIOMETRICS
NT ANTHROPOMETRY
NT BALLISTOCARDIOGRAPHY
NT BODY MEASUREMENT (BIOLOGY)
NT CARDIOGRAPHY
NT ELECTROCARDIOGRAPHY
NT ELECTROENCEPHALOGRAPHY
NT ELECTROMYOGRAPHY
NT ELECTROPLETHYSMOGRAPHY
NT ELECTRORETINOGRAPHY
NT PHONOCARDIOGRAPHY
NT PLETHYSMOGRAPHY
A system for continuous measurement of gas exchange and respiratory functions. p0577 A73-10172
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt. p0583 A73-11505
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal p0047 A73-13823
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields. p0053 A73-14289
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells

with the aid of the membrane-covered platinum electrode
p0056 A73-14647
A new method for simultaneous measurement of total respiratory resistance and compliance.
p0084 A73-16799
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522
Examples for signal-noise improvement with the aid of polarity correlation analysis in the biological sector
p0086 A73-17593
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325
On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934
Modification and updating of the bioelectric DS2C amplifier for a FET input.
p0159 A73-22936
Neuron analyzer technique for poststimulus histogram plotting of neuron excitation as function of stimulus onset time
p0165 A73-23811
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
Work-rest cycle effects on airline pilots performance, considering central nervous system changes measurement techniques
p0282 A73-32059
Book - Biomedical instrumentation and measurements.
p0312 A73-35860
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
Angiotensiotonography using an air plethysmograph
p0322 A73-36575
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
Computer controlled automatic TV-microscope system for tracking and measuring nerve cell processes in designated axons and dendrites
p0359 A73-39763
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054
Sentography - Dynamic forms of communication of emotion and qualities.
p0427 A73-44180
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
Transducer for converting arterial pulse wave into electric signals
[NASA-CASE-GSC-11531-1] p0612 N73-11097
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134] p0142 N73-16104
Computer program for evaluating biological parameters
[ISS-72/4] p0186 N73-19128
Biometric and radiant transfer characteristics of forest vegetation
p0378 N73-29328

BIONICS
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168
Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data
p0577 A73-10169
Functional models adequacy for brain activity simulation, discussing transfer, forward and feedback loops, hierarchy, reciprocity and self organizing aspects
p0579 A73-10651
Neuron networks modeling from viewpoint of intracellular and cell-medium interaction, discussing coding properties and nonsingular self adjusting system response
p0579 A73-10652
Computerized correlation analysis of single and multiple neuron pulse activity, considering temporal, sequential and entropy characteristics
p0579 A73-10653
Certain aspects of the bionic analysis and control of dynamic systems
p0580 A73-10658
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for anthropomorphic locomotion system synthesis
p0581 A73-11052
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator
p0588 A73-12557
Perspiration secretion distribution over human body based on extended Kerslake cylinder model, comparing with predicted 4 hr sweat rate
p0041 A73-13122
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles
p0042 A73-13302
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657
Method for quantitative estimation of the functional state of the motor apparatus
p0047 A73-13822
Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways
p0048 A73-14114
Finite element displacement analysis of a lung.
p0056 A73-14661
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
Information theory mathematical models applied to different visual function activity phases, covering Shannon and Fisher probability models, Shreider semantic theory and Kolmogorov algorithm
p0060 A73-15784
Mathematical models for distance perception of earth surface features observed from ascending vehicle, considering convergence, accommodation and monocular parallax mechanisms
p0060 A73-15785
Mathematical description of some visual inertia effects
p0060 A73-15786

Axiomatic mathematical model for human visual edge contrast based on additivity, one-dimensionality and contrast continuity parameters
p0060 A73-15788
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures
p0060 A73-15789
A model of a memory device based on neuron-like elements which realizes the holographic principles of data recording and readout
p0061 A73-15792
Mathematical and physical models of human long and short term memory, considering information processing and memorization at lower visual perception levels
p0061 A73-15793
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception
p0061 A73-15796
Human memory model with associative linkage between neuronal network information elements
p0061 A73-15797
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
Mechanical modeling of eye muscle dynamics.
p0097 A73-18816
Structural models of simple sensory motor co-ordination.
p0098 A73-18890
Predictions of the dynamic response of the lung.
p0116 A73-19477
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
Ergatic organism defined as multipurpose nonautonomous control system with homeostasis with respect to functional operations conservation
p0119 A73-20048
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
Stability behavior of adapting and untrained random logic nets, enabling intelligent interaction with environment
p0122 A73-20400
Digital computer studies of respiratory control.
p0123 A73-20577
A model to predict respiration from VCG measurements.
p0123 A73-20578
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587
Contrast and assimilation effects analysis based on receptive field models of vertebrate retinal function
p0123 A73-20812
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow
p0126 A73-21375
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
Human retina-patterned ideal perceiving machine to calculate visual acuities for spatial arrangement in line figures
p0129 A73-21564
Russian book on mathematical models of biological systems covering biogeocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems
p0154 A73-22347
Theoretical trans-respiratory pressure during rapid decompression. I Model experiment. II - Animal experiments.
p0154 A73-22530
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174
Light evoked changes in potential difference between inside and outside of cells in Limulus ommatidia, describing multistage model of generator potential
p0160 A73-23309
Functional model of the frequency channel of the peripheral auditory analysor
p0164 A73-23808
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810
Water-salt homeostasis mathematical model, solving equations with analog and digital computers
p0166 A73-23941
Formalization of an arterial pressure stabilization system
p0168 A73-24467
Impact on a simple physical model of the head.
p0170 A73-24770
The nature of the optimum muscular performance achieved in the execution of fast eye rotations.
p0171 A73-24772
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing
p0194 A73-25143
Analysis of swimming motions.
p0194 A73-25184
Useful future action models of instrumental reflexes and voluntary actions based on memory role in engram storage of received stimuli
p0194 A73-25199
Calcium movements and excitation-contraction coupling in cardiac cells.
p0198 A73-25601
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Acoustic model and linguistic, syntactic, lexical and semantic factors in speech perception and production process
p0243 A73-30277
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
Photoelectric servo simulator for pupil, using Wheatstone bridge with CdS light dependent resistor
p0246 A73-30399
Heart rate variability and work-load measurement.
p0250 A73-30879
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization.
p0287 A73-33161
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Analysis of vestibular effects in experiments on swings
p0305 A73-34235
Human visual system model based on neurological connectivity data from anatomical dissection, in vivo physiological measurements and psychological experimentation
p0309 A73-35239
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242

Modeling, instrumentation and data evaluation in clinical electroretinography, discussing Fourier analysis of sinusoidal light stimulation response in normal and abnormal humans
p0310 A73-35359
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429
Endolymph fluid mechanics in semicircular canals approximated by rigid torus filled with incompressible Newtonian fluid
p0315 A73-36430
A non-Newtonian model for fluid flow in the semicircular canals.
p0315 A73-36431
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
Three models of the vibrating ulna.
p0347 A73-37543
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
A diagnostic program - Problems of predicting myocardial infarction on a digital computer
p0354 A73-38998
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004
Mathematical analysis of the operation of regulatory mechanisms of the spinal cord
p0354 A73-39005
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
Continual mechanochemical model of muscular tissue
p0381 A73-40182
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751
Response delays and the timing of discrete motor responses.
p0387 A73-41177
Correlative function formalism for neuron networks with limited communication channels and active-refractive-storing signal action
p0389 A73-41277
A model of diffusion in the respiratory unit.
p0391 A73-41638
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition
p0393 A73-41816
Investigation of the nature of biological rhythm sensors by means of automatic networks
p0393 A73-41865
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
A model of the human in a cognitive prediction task.
p0399 A73-42223
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches
p0408 A73-43103
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium
p0408 A73-43105
A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature.
p0424 A73-43292
Bee image detection by ommatidium based on physical model using electromagnetic analysis of light absorption in photoreceptor
p0424 A73-43344
Electrical field distribution in the human body.
p0427 A73-44216
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Physical model selection for the balance preservation system in man
p0431 A73-44903
Probability estimate models for reliable function of redundant systems with adaptable and inadaptable neuron-like restoration organs
p0431 A73-44904
Algebraic nature of thought formation structures
p0431 A73-44905
Dynamics of the balance preservation system of man
p0432 A73-44909
Determination of performance precision and informativeness of electronic models of the sensory system of man
p0432 A73-44911
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067
Pattern recognition by devices consisting of arrays of cooperating elements
[PB-211238] p0102 N73-14096
Soviet bibliography on biocybernetics material received from Jan. to May 1972
[AD-750129] p0113 N73-15167
Artificial intelligence in integrated circuit control of bionic manipulators
[NASA-CR-131403] p0224 N73-20156

BIOPAKS
Mathematical model for photosynthetic gas exchanges in growing wheat and radish biopaks of life support systems
p0063 N73-12081

BIOPHYSICS
NT HEALTH PHYSICS
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range
p0089 A73-17748
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of

the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351
Relationship of theoretical physics to molecular biology, considering synthesis, ontogenesis, phylogenesis, evolution models, thermodynamic applications and Eugen prebiological evolution theory
p0281 A73-31823
Biological order, structure and instabilities in terms of irreversible thermodynamic processes, entropy, dissipative structures, randomness, abiogenesis, hierarchic organization, chemical reactions and molecular biology
p0281 A73-31824
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus.
p0397 A73-42171
Biophysical mechanisms of noninvasive measurement of CVP in man
[NASA-CR-130348] p0133 N73-16039
BIOREGENERATION
U REGENERATION (PHYSIOLOGY)
BIOREGENERATIVE LIFE SUPPORT SYSTEMS
U CLOSED ECOLOGICAL SYSTEMS
BIOSATELLITE 2
Dosimetric analyses for Biosatellite 2 yeast and artemia radiation exposure experiment
[NASA-CR-127142] p0069 N73-13082
Biosatellite 2 experiments for determining effects of prolonged weightlessness on biological processes
[CONF-720441-1] p0107 N73-15119
BIOSATELLITES
NT BIOSATELLITE 2
BIOSENSORS
U BIOINSTRUMENTATION
BIOSIMULATION
U BIONICS
BIOSPHERE
U EARTH HYDROSPHERE
U LOWER ATMOSPHERE
BIOSYNTHESIS
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
Conditioned reflex learning and phenamine-stimulated functional activation of cerebral synaptic, protein synthesizing and energy generating apparatus
p0085 A73-17177
Abiogenic formation of porphin, chlorin and bacteriochlorin.
p0090 A73-17934
A mechanism for polypeptide synthesis on a protein template.
p0090 A73-17943
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
Genetic code evolution in terms of abiotic polynucleotide synthesis, suggesting alternating sequences of purines and pyrimidines as polypeptide codes
p0162 A73-23469
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
An experimental basis for carcinogenic effects of ultraviolet radiation.
p0203 A73-26485
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296
The evolution of lignin - Experiments and observations.
p0241 A73-29649
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399
Protein synthesis in lung - Recovery from exposure to hyperoxia.
p0323 A73-36653
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels
p0383 A73-40372
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex
p0384 A73-40750
Biosynthesis of RNA in the brain cortex during various functional states
p0389 A73-41262
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain
p0389 A73-41278
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Sterols of the fungi - Distribution and biosynthesis.
p0429 A73-44699
Biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125
BIOTECHNOLOGY
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
Two dimensional eye movement recording using a photo-electric matrix method.
p0121 A73-20259
Automatic surface inoculation of agar trays.
p0155 A73-22550
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials
p0280 A73-31549
Aerospace biotechnology research projects
[AD-759277] p0300 N73-25135
Interaction concept for improving efficiency of man machine systems
[JPRS-59149] p0340 N73-27070
BIOTELEMETRY
Fatigue in flight personnel during long flights
p0585 A73-12153
Biotelemetry; Proceedings of the International Symposium, Nijmegen, Netherlands, May 5-8, 1971.
p0052 A73-14276
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280
Pulse duration-frequency modulation multichannel biotelemetry system for physiological parameter assessment during exercise, noting circuit diagrams of radio transmitter and receiver
p0052 A73-14281
Telemetric measurement of local blood flow by heat conduction probes.
p0052 A73-14282

Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284
Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing
p0053 A73-14286
Telemetry of venous blood pressure at rest and at muscle activity during running.
p0053 A73-14290
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart.
p0053 A73-14291
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292
Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise
p0053 A73-14293
Telemetrical measurements during sport performance on sportsmen with cardiac arrhythmias.
p0054 A73-14294
Hazard and interference avoidance in implant telemetry, discussing leakage currents, muscle interference, magnetic influence, high frequency noise, electrode and respiratory artifacts, etc
p0054 A73-14295
Telemetry methods for maximum static muscle strength measurements, considering dynamic force measurement possibilities
p0054 A73-14296
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
Three channel FM telemetry system for long term EEG monitoring, discussing routine clinical operation results
p0054 A73-14298
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
Surgically implanted single and multichannel telemetry systems for monitoring single and multiple physiological parameters, discussing size and power requirements
p0054 A73-14302
A remotely operated ECG telemeter for chronic implantation in rats.
p0054 A73-14303
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method.
p0054 A73-14304
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
Telemetry of cardiovascular parameters on fighter aircraft flying pilots.
p0055 A73-14309
Miniature biotelemeter giving 10 channels of wideband biomedical data.
p0058 A73-15388
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408
Use of an on-line computer in a study of cardiac arrhythmia.
p0059 A73-15644
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
A respirometer for the continuous measurement of respiration volume with remote transmission
p0119 A73-20035
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system
p0162 A73-23381
The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information.
p0207 A73-27646
Circuit technology of a temperature-measurement transmitter for biotelemetric applications
p0239 A73-28575
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
Ultrasonic transducer instrument with broad beam dispersal for blood vessel displacement recording in chronic animal experimentation
p0408 A73-43109
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071
Ultrasonic marine biotelemetry transmitter utilizing metal oxide semiconductor integrated circuits
[AD-748605] p0074 N73-13119
Satellite system for tracking of wildlife and birds in natural environment
[NASA-CR-130301] p0104 N73-15090
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134] p0142 N73-16104
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] p0259 N73-22045
Telemetry experiments with hibernating bear
[NASA-CR-133926] p0418 N73-31000

BIOTIN
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586

BIRDS
NT HOMEOTHERMS
Migration corridors for ducks and geese and effects on aviation safety
[AD-748114] p0073 N73-13109
Satellite system for tracking of wildlife and birds in natural environment
[NASA-CR-130301] p0104 N73-15090
Wind tunnel tests to determine structural integrity of birds under conditions simulating ingestion of birds into inlets of high speed aircraft
[NASA-TM-X-68163] p0106 N73-15114

BIVARIATE ANALYSIS
The use of bivariate distributions in achieving anthropometric compatibility in equipment design. I, II.
p0081 A73-16702

BLACKOUT (PHYSIOLOGY)
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
BLASTOFF
U ROCKET LAUNCHING
BLEED-OFF
U PRESSURE REDUCTION
BLIGHT
Multispectral remote sensing techniques for identification of corn blight disease
[NASA-TM-X-69055] p0136 N73-16064
BLINDNESS
NT FLASH BLINDNESS
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218
Blind fish responses to gravitational changes as in parabolic flight
p0226 N73-21101
Temporary blindness of monkeys caused by combined effects of phosdrin and atropine exposure
[FAA-AM-73-4] p0338 N73-27055
BLOCKING
Semicircular canal plugging response in cats to rotary stimulation
p0111 N73-15151
BLOOD
NT EOSINOPHILS
NT ERYTHROCYTES
NT LYMPHOCITES
NT RETICULOCYTES
NT WHITE BLOOD CELLS
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads
p0584 A73-11924
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Mechanisms of certain functional shifts during change in the blood of the content level of external pancreatic-gland secretion components
p0081 A73-16700
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique
p0153 A73-21871
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Water and salt metabolism in hypokinesia-subjected animals
p0207 A73-27704
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Reactivity and certain metabolic indices during prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162
Age pecularities of whole-blood transketolase activity in healthy persons
p0276 A73-31164
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169
Temperature conditions and blood supply of the brain in animals
p0304 A73-34229
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
The specific resistance of blood at body temperature.
p0402 A73-42670
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
Verification program for Inflight Blood Collection system
[NASA-CR-128645] p0067 N73-12112
Bacterial reduction of organically bound phosphoric acid in blood
[NASA-TT-F-14723] p0069 N73-13080
Research on laser irradiation effects, sensory psychophysiology, and human blood processing for military medicine
[AD-749440] p0108 N73-15130
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134
Mortality and blood cell count variation in mice after irradiation with fast neutrons and X rays
[BMVG-FBWT-72-16] p0138 N73-16077
Stabilization methods in collecting and shipping of human sera for chemical analyses
p0143 N73-17053
Multiple immunoassay system for determining parathyroid hormone, calcitonin, and vitamin D in human blood
p0174 N73-18112
Prolonged bed rest effects on human blood hormone level periodicities
p0175 N73-18114
Guide to units and interpretation of blood alcohol measurements
[DCIEM-TM-848] p0175 N73-18120
Effect of hypoxia and hyperoxia on rate of blood deoxygenation, and influence of antioxidants in mice
p0216 N73-20096
Effect of hypokinesis of varying duration on fluid-electrolyte metabolism and composition in blood and tissues of animals
p0216 N73-20098
Morphological composition of peripheral blood of crew members of Soyuz-9 and Salyut-1
p0217 N73-20104
Toxicological properties of rocket exhaust products and blood analysis for beryllium oxide content
[AD-754936] p0220 N73-20131
Methods for determining blood alcohol levels in pilots
p0229 N73-21124
Lower body negative pressure for preventing body fluid shifts during weightlessness
p0256 N73-22017
Respiratory function and blood acid base equilibrium in human adaptation to high altitude environment
p0372 N73-29030

Food consumption and morphological indices of blood in white mice with replacement of air nitrogen by inert gases in pressurized chamber p0442 N73-33020
Effect of fibrinogen concentration on viscosity of human blood [DLR-FB-73-54] p0446 N73-33046

BLOOD CIRCULATION
NT BRAIN CIRCULATION
NT CARBOXYHEMOGLOBIN
NT CORONARY CIRCULATION
NT INTERCRANIAL CIRCULATION
NT INTRAVASCULAR SYSTEM
NT ISCHEMIA
NT OCULAR CIRCULATION
NT PULMONARY CIRCULATION
A criterion for oxygen supply optimality in tissues and the capillary circulation rate p0047 A73-13821
Biological role of atmospheric oxygen in the mechanism of blood coagulation p0087 A73-17678
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis. p0094 A73-18336
Central, femoral, and brachial circulation during exercise in hypoxia. p0127 A73-21506
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue. p0159 A73-23174
Controlled tachycardia through voluntary change in exercise regime, investigating relation between heart rate and blood circulation p0169 A73-24521
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress p0169 A73-24522
Changes in microvascular diameter and oxygen tension induced by carbon dioxide. p0200 A73-26116
A new phenomenon of an active intraorgan pumping function of skeletal muscles p0206 A73-27446
Changes in blood-flow distribution during acute emotional stress in dogs. p0238 A73-28533
Influence of flow and pressure on wave propagation in the canine aorta. p0243 A73-30066
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system p0277 A73-31173
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology p0280 A73-31623
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads p0322 A73-36570
Specific features in the activity of the oxygen transport system of the organism during hand-performed working cycles of submaximum intensity p0323 A73-36579
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains p0323 A73-36581
Measurement of cardiac output with and organ trapping of radioactive microspheres. p0324 A73-36661
Neurogenic and local regulation of resistance and capacitance blood vessels, noting sympathetic nervous system influence on musculocutaneous and splanchnic regions p0426 A73-43927
Simulated high altitude determination of interrelation of systematic and cellular responses to acute and chronic hypoxia [AD-743536] p0594 N73-10081
Circadian rhythm change study of transmeridian flight and medication effects on mildly hypertensive subject [AD-743300] p0595 N73-10090
Influence of Pervitin in decreasing gas bubbles in blood during decompression [DLR-FB-72-66] p0175 N73-18117
Influence of immersion in temperature controlled bath on circulation and water balance in human body [NASA-TT-F-14834] p0185 N73-19124
Effect of transverse overloads and gamma rays at 100 to 200 r on peripheral blood in dogs p0214 N73-20083
Comparison of peripheral blood of acclimatized and nonacclimatized irradiated rats under prolonged conditions of reduced barometric pressure p0215 N73-20088
Change in content of gases in blood when man is exposed to high ambient temperatures p0217 N73-20105
Human regional blood circulation changes during bed rest experiment p0255 N73-22012
Changes in human cerebral circulation during prolonged bed rest test p0256 N73-22020
Lower body decompression effects on cardiac cycle and human acceleration tolerance p0263 N73-23037
Long term bed rest effects on human retinal blood circulation and intraocular pressure p0263 N73-23038
Distribution parameter model for acceleration forces acting on arterial system [AD-756530] p0294 N73-24128
Numerical solution of viscous fluid flow in finite tube with deformable walls in presence of valves for application to blood circulation process p0298 N73-25117
Temperature interrelationships between rat brain tissues and cerebral blood supply p0372 N73-29026
Human circadian rhythms of blood circulation, respiration and catabolism under flight simulation stress [DLR-FB-72-49] p0413 N73-30073

BLOOD COAGULATION
Hemocoagulation system function in mountain inhabitants and during altitude acclimatization, noting parasympathetic nervous system tonus p0584 A73-11923
Biological role of atmospheric oxygen in the mechanism of blood coagulation. p0087 A73-17678
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current p0126 A73-21321
Intravascular platelet aggregation in the heart induced by stress. p0130 A73-21805
Hemocoagulation and thrombocyte state during hypokinesia after highland adaptation p0208 A73-27713
Emotional overstress effects on the indices of the blood coagulation system in monkeys p0249 A73-30846
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro. p0325 A73-36782
Hemotherapy of coagulation system disturbances of hepatolienal origin p0428 A73-44299
Oxygen redox processes in blood coagulation mechanism p0063 N73-12079

BLOOD FLOW
A nonlinear analysis of pulsatile flow in arteries. p0579 A73-10449
Normal pulmonary pressure-flow relationship during exercise in the sitting position. p0042 A73-13124
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles p0042 A73-13302
Telemetric measurement of local blood flow by heat conduction probes. p0052 A73-14282
Blood flow and pressure and ECG data acquisition and transmission via radio telemetry system with electromagnetic flowmeter

p0052 A73-14283
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity.
p0085 A73-17274
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199
Pattern of blood flow within the heart - A stable system.
p0125 A73-21214
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
Distribution of systemic blood flow during cardiopulmonary bypass.
p0158 A73-22930
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter.
p0159 A73-23173
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
Oxygen consumption alteration effects on human endurance capacity as function of relative work, muscle blood flow and anaerobic metabolism
p0241 A73-29753
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Factors influencing coronary blood flow in the presence of coronary obstructive disease.
p0321 A73-36539
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man.
p0324 A73-36659
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry.
p0348 A73-37795
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
Relationship between organ weight and blood flow in rats adapted to simulated high altitude.
p0387 A73-41156
Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories.
p0403 A73-42678
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches
p0408 A73-43103
Velocity distribution in aortic flow.
p0408 A73-43104
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108
A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature.
p0424 A73-43292
Comparison of plethysmographic and electromagnetic flow measurements.
p0427 A73-44215
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Design of relative velocity blood viscometer
p0231 N73-21142
Blood supply to skeletal muscles of rats during hypokinesia
p0442 N73-33018

BLOOD GROUPS
Blood groups and plasma cholesterol esterification.
p0408 A73-43106
Blood group A sub-groups and serum cholesterol.
p0408 A73-43107

BLOOD PLASMA
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
Body temperature effect on protein conformation stability in healthy and diseased organisms, noting blood plasma albumin fractions
p0057 A73-14822
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760
Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Serum cholesterol and plasma lipid elevation separation of hypercholesterolemic patients for atherosclerosis therapy
p0320 A73-36533
Red cell volume with changes in plasma osmolarity during maximal exercise.
p0324 A73-36654
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782

Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
Mechanisms of hyperlipidaemias in different clinical conditions.
p0405 A73-42832
Blood groups and plasma cholesterol esterification.
p0408 A73-43106
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064
Lactate origins and renewal in blood plasma, considering metabolism, enzymatic resynthesis and final excretion in urine
p0434 A73-45157
Complete activity of lactate dehydrogenase and isoenzymes in plasma and myeloid cells [NASA-TT-F-14586]
p0592 N73-10070
Blood plasma hyperosmolality and antidiuretic hormone inhibition in alcoholic intoxication [NASA-TT-F-13910]
p0609 N73-11079
Behavior of enzyme activities in blood plasma after breathing hyperbaric oxygen [DLR-FB-71-96]
p0112 N73-15163
GAST and GALT aminotransferases activity of dog blood serum following total exposure to gamma rays with stomach or head shielded
p0213 N73-20075
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes [AD-749323]
p0258 N73-22035
Renin-angiotension system in simulated hypervolemia induced by immersion [NASA-TT-F-14885]
p0258 N73-22036
Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030
Using lower body negative pressure to prevent decrease in volume of circulating plasma during hypokinesia
p0444 N73-33036

BLOOD PRESSURE
NT DIASTOLIC PRESSURE
NT HYPERTENSION
NT HYPOTENSION
NT SYSTOLIC PRESSURE
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124
Blood flow and pressure and ECG data acquisition and transmission via radio telemetry system with electromagnetic flowmeter
p0052 A73-14283
Telemetry of venous blood pressure at rest and at muscle activity during running.
p0053 A73-14290
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart.
p0053 A73-14291
Telemetry of cardiovasculary parameters on fighter aircraft flying pilots.
p0055 A73-14309
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475
Significance of the Bohr and Haldane effects in the pulmonary capillary.
p0129 A73-21614
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analoque.
p0159 A73-23174
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Formalization of an arterial pressure stabilization system
p0168 A73-24467
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog.
p0196 A73-25337
A new phenomenon of an active intraorgan pumping function of skeletal muscles
p0206 A73-27446
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
Blood pressure and body temperature dynamic control systems and respiration relationship to heart rate variability
p0250 A73-30878
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
The use of simple indicators for detecting potential coronary heart disease susceptibility in the third-class airman population.
p0328 A73-36912
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162

Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655
A new method of measuring arterial dilation and its application.
p0402 A73-42669
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries
p0429 A73-44720
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160
Weight, blood pressure, and intraocular pressure in young healthy males prior to and after 50-km walk
[NASA-TT-F-14557] p0608 N73-11071
Influence of elastic properties of human body on arterial blood pressure measurement
p0099 N73-14072
Biophysical mechanisms of noninvasive measurement of CVP in man
[NASA-CR-130348] p0133 N73-16039
Blood pressure and cholesterol level screening for preventing heart diseases in flight crews of commercial airline
p0146 N73-17076
Initial systole and dicrotic notch detecting circuitry for monitoring arterial pressure pulse
[NASA-CASE-LEW-11581-1] p0178 N73-18139
Design and performance of strain gage transducer as blood pressure recording device
p0231 N73-21144
Effects of hydrostatic water bath pressure on capillary blood pressure and connective tissue dehydration
[NASA-TT-F-14894] p0265 N73-23052
Measurement of arterial pressure under influence of ODNT
[NASA-TT-F-15087] p0437 N73-31998
Measurement of arterial pressure by tachooscilloscope method
[NASA-TT-F-15088] p0439 N73-32016
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

BLOOD VESSELS
NT AORTA
NT ARTERIES
NT CAPILLARIES (ANATOMY)
NT GLOMERULUS
NT VEINS
Cerebral circulation alteration during hypothermia
p0081 A73-16698
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements
p0087 A73-17682
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow
p0126 A73-21375
Changes in the vascular tone of certain organs during experimental embolism of pulmonary circulation
p0154 A73-22366
Modification of the electroencephalograph 4EEG-1 for polygraphy
p0154 A73-22370
Book - The physiology of the cerebral circulation.
p0166 A73-23945
Changes in microvascular diameter and oxygen tension induced by carbon dioxide.
p0200 A73-26116
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses
p0322 A73-36578
Analysis of pressure waves as a mean of diagnosing vascular obstructions.
p0346 A73-37524
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches
p0408 A73-43103
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium
p0408 A73-43105
Ultrasonic transducer instrument with broad beam dispersal for blood vessel displacement recording in chronic animal experimentation
p0408 A73-43109
Neurogenic and local regulation of resistance and capacitance blood vessels, noting sympathetic nervous system influence on musculocutaneous and splanchnic regions
p0426 A73-43927

BLOOD VOLUME
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325
Estimation of left ventricular size by echocardiography.
p0159 A73-22999
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.
p0196 A73-25568
Xenon 133 measurement of cerebral volumetric circulation rates during papaverin and intensain vasodilation of canine and feline intercranial vessels, showing vessel resistance reduction
p0239 A73-29074
A simplified method of calculating thermodilution curves
p0276 A73-31168
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572
Angiotensiotonography using an air plethysmograph
p0322 A73-36575
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence.
p0361 A73-39790
Evaluation of several methods for computing stroke volume from central aortic pressure.

p0384 A73-40638
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685
Stroke volume measurement from an integral rheogram of human body
p0429 A73-44719
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews
p0174 N73-18106
Biophysical properties of human red blood cells exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072

BLUE GREEN ALGAE
Circadian rhythms - Subcellular and biochemical aspects.
p0089 A73-17824
Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes
p0096 A73-18577
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503
Effect of toxic substances on algae by observing photosynthesis determined by oxygen production of algae
[DRIC-TRANS-2991] p0187 N73-19139
Simazine influence on green algae photosynthetic pigments noting chlorophyll luminescence spectra
[DRIC-TRANS-2992] p0258 N73-22040
Influence of blue green algae on crystalline calcium carbonate formation on river rocks
[NASA-TT-P-15028] p0375 N73-29046

BLURRING
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light.
p0581 A73-10973
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area
p0583 A73-11503

BOATS
NT LIFEBOATS

BODY COMPOSITION (BIOLOGY)
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104

BODY FLUIDS
NT BLOOD
NT CEREBROSPINAL FLUID
NT ENDOLYMPH
NT EOSINOPHILS
NT ERYTHROCYTES
NT LYMPHOCYTES
NT RETICULOCYTES
NT SALIVA
NT SWEAT
NT URINE
NT WHITE BLOOD CELLS
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.
p0056 A73-14649
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
The effect of immobilization on body fluid volume in the rat.
p0358 A73-39487
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
Liquid retention in chlorpropamide therapy and water intoxication of patients
[NASA-TT-F-14597] p0609 N73-11077
Computer controlled infusion pump for time varying input of calcium into physiological systems
[NASA-CASE-ARC-10447-1] p0101 N73-14092
Effect of hypokinesis of varying duration on fluid-electrolyte metabolism and composition in blood and tissues of animals
p0216 N73-20098
Accuracy of various tracer methods for measuring body water compartments during bed rest
[NASA-TR-R-406] p0295 N73-24133
Fluid-electrolyte balance during 120-day bed rest
p0443 N73-33028

BODY KINEMATICS
Angular measurements of foot motion for application to the design of foot-pedals.
p0580 A73-10773
German monograph - Experimental investigation of the structure of joint movements in the range of motions of the arms and of the entire body, giving attention to a presentation in a man-related basic system.
p0047 A73-13812
Book - How man moves: Kinesiological studies and methods.
p0048 A73-13993
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
Analysis of swimming motions.
p0194 A73-25184
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Vertical arm reaching movements for various gravitational levels, measuring reach time and angular and lower arm velocities
p0424 A73-43218
Physical model selection for the balance preservation system in man
p0431 A73-44903
Lower body decompression effects on cardiac cycle and human acceleration tolerance
p0263 N73-23037

BODY MEASUREMENT (BIOLOGY)
NT ANTHROPOMETRY
NT ELECTROPLETHYSMOGRAPHY

Mathematical analysis of body surface potentials.
p0059 A73-15646
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036
Estimation of left ventricular size by echocardiography.
p0159 A73-22999
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798
Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] p0101 N73-14093

BODY SIZE (BIOLOGY)
Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics
p0096 A73-18474
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
Regression of altitude-produced cardiac hypertrophy.
p0433 A73-45065

BODY SWAY TEST
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Physical/mathematical analyses on human vestibular responses to acceleration stresses
p0373 N73-29033
Human hemodynamic responses and vestibular tolerances to body sway tests
p0373 N73-29034

BODY TEMPERATURE
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.
[AD-751735] p0576 A73-10163
Unacclimatized male Caucasians lower critical temperature determination for subsequent investigation of ethnic variability in acute cold exposure responses
p0577 A73-10166
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Muscle, skin and esophageal temperature measurement during transient and steady state phases of negative work exercise on bicycle ergometer
p0048 A73-14112
Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies
p0049 A73-14123
Telemetric measurement of local blood flow by heat conduction probes.
p0052 A73-14282
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
Body temperature effect on protein conformation stability in healthy and diseased organisms, noting blood plasma albumin fractions
p0057 A73-14822

Low body temperature effects on learned behavior retention under hibernation conditions in squirrels
p0078 A73-16324
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
Thermoregulatory reactions of animals in a helium-oxygen medium
p0088 A73-17695
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Cerebral temperature oscillations and vascular responses in man
p0164 A73-23805
Portable electronic thermometer for temperature measurement during exercise elevation of body temperature in heat acclimatization experiment
p0169 A73-24567
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Digital temperature-measuring device for medical applications
p0236 A73-28338
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535
Blood pressure and body temperature dynamic control systems and respiration relationship to heart rate variability
p0250 A73-30878
Effect of body temperature on ventilatory transients at start and end of exercise in man.
p0275 A73-31127
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Calculation of temperature distribution in the human body.
p0281 A73-31999
The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
Temperature conditions and blood supply of the brain in animals
p0304 A73-34229
Investigation of the possibility of human adaptation to a 16-hour day
p0305 A73-34238
Temperature of exhaled air of healthy subjects
p0323 A73-36583
Tolerance to heat following cold stress.
p0325 A73-36784
Human performance at elevated environmental temperatures.
p0325 A73-36787
Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054
The specific resistance of blood at body temperature.
p0402 A73-42670
Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns
p0406 A73-42859

Primitive mammals phylogeny relationship to homeothermic abilities, discussing body temperature, thermoregulation, basal metabolism rates, hibernation, nychthemeral rhythms and responses to heat and cold
p0406 A73-42860
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc
p0406 A73-42861
Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc
p0406 A73-42862
Thermoregulation evolution in various animals, discussing body size and composition effects, body temperature variations, control mechanisms, heat loss and production, behavior and ontogeny
p0406 A73-42863
Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994
Spectral emissivity of skin and pericardium.
p0427 A73-44213
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
Tests to evaluate heat loss from Navy diver suits in water of 55, 45, and 35 F
[AD-747276] p0613 N73-11103
Thermal resistance of clothing noting radiative body heat transfer, air layers, and clothing thickness
[DRIC-TRANS-2920] p0067 N73-12117
Evaluation of sex difference in thermal sensitivity in men and women
[NASA-CR-114564] p0150 N73-17113
Effects of prolonged bed rest on body temperature and heart rate periodicity in man
p0175 N73-18113
Changes in circadian rhythm of aircraft pilot oral body temperature as result of transmeridian flights
[DLR-FB-73-01] p0178 N73-18140
Low barometric pressure effects on human thermoregulation function
p0254 N73-21996
Influence of He, N2, and N20 environments on physiological parameters of rats
p0371 N73-29019
Human body temperature dynamics in adaptation to changed work-sleep cycles
p0373 N73-29036
Heat exchange of hand as function of local thermal conditions
[NASA-TT-F-15143] p0445 N73-33043

BODY TEMPERATURE REGULATION
U THERMOREGULATION

BODY WEIGHT
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Organ and body mass changes in restrained and fasted domestic fowl.
p0057 A73-14975
Statistical correlations of maximum oxygen consumption, body weight and endurance /work/ performance in exercise-oxygen studies
p0096 A73-18472
Biological effects of lasting hypodynamia on young albino rats in 62 day confinement, considering weight, growth and sexual behavior
p0124 A73-20983
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975
Some aversive characteristics of centrifugally generated gravity.
p0238 A73-28506
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784
Relationship between organ weight and blood flow in rats adapted to simulated high altitude.
p0387 A73-41156
Chronic acceleration effects on homeotherm physiological adaptation in terms of body weight, tolerable field intensity, growth and fat deposition inhibition, etc
p0398 A73-42177
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
Weight, blood pressure, and intraocular pressure in young healthy males prior to and after 50-km walk
[NASA-TT-F-14557] p0608 N73-11071
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews
p0174 N73-18106
Influence of personal characteristics on likelihood of decompression sickness
[NASA-CR-135495] p0418 N73-31002
Dynamics of weight change and variations in weight indices of internal organs in white mice as function of atmospheric composition and diet
p0443 N73-33022

BOEING AIRCRAFT
NT BOEING 720 AIRCRAFT
NT C-135 AIRCRAFT

BOEING MILITARY AIRCRAFT
U MILITARY AIRCRAFT

BOEING 720 AIRCRAFT
Computerized simulation of passenger emergency evacuation efficiency using Boeing 720 aircraft models
[FAA-AM-72-30] p0150 N73-17119

BONDING
NT AGGLUTINATION

BONE MARROW
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat.
p0587 A73-12187
Differentiations and maturations in red and white blood cells construction in red bone marrow, noting hematopoietic system formation from single source cell
p0085 A73-17473
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
Proliferative activity of bone marrow in dogs exposed to three-year chronic gamma irradiation
p0217 N73-20102
Leukopenic response of dog bone marrow for evaluating hematopoietic tissue function
p0255 N73-22009

BONES
NT CEREBRUM
NT CRANIUM
NT INTRACRANIAL CAVITY
NT MARROW
NT PELVIS
NT SKULL
NT ULNA
NT VERTEBRAE
Experimental determination of shear moduli in a compact bone tissue
p0045 A73-13742
Strength limits correlation to modulus of elasticity for compact bone material from compression tests, noting anisotropy tensor analysis
p0045 A73-13744
Implantable transducer for in vivo measurement of bone strain.
p0206 A73-27443
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996
Changes in functional construction of bone in rats under conditions of simulated increased gravity.

p0312 A73-35863
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981
Effect of calcium-deficient diet on bone structure of pigs and dogs
[NASA-TT-F-13917] p0592 N73-10067
Annotated bibliography with preliminary analysis on dysbaric osteonecrosis
[AD-747258] p0071 N73-13100
Chemical and orthopedic properties of ceramic bone implants in monkeys
[AD-754982] p0221 N73-20134
Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] p0415 N73-30090
Effect of high ambient temperature on calcium content of human bone tissue
p0444 N73-33033

BOOLEAN ALGEBRA
Algebraic nature of thought formation structures
p0431 A73-44905

BOOST
U ACCELERATION (PHYSICS)

BOOTS (FOOTWEAR)
Mercury, Gemini and Apollo space suits, discussing glove development, boot design, portable life support equipment and extravehicular mobility
p0289 A73-34025

BOSONS
NT LIGHT BEAMS
NT PHOTONS
NT PIONS

BOUNDARY LAYER NOISE
U AERODYNAMIC NOISE

BOW SHOCK WAVES
U SHOCK WAVES

BRADYCARDIA
Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244
Bradycardia and death in guinea pigs exposed to acceleration overloads after injections of aminothiol group radioprotectors
p0211 N73-20057
Role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072

BRAIN
NT BRAIN STEM
NT CEREBELLUM
NT CEREBRAL CORTEX
NT CEREBRUM
NT HIPPOCAMPUS
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Functional models adequacy for brain activity simulation, discussing transfer, forward and feedback loops, hierarchy, reciprocity and self organizing aspects
p0579 A73-10651
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area
p0583 A73-11503
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator
p0588 A73-12557
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior
p0051 A73-14259
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
Space-time dynamics of the impulse activity in human-brain neuron populations
p0080 A73-16692
The superior colliculus of the brain.
p0094 A73-18347
Russian book - Tissue, oxygen in the presence of extremal flight factors.
p0116 A73-19425
Electrophysiological investigation of suprasegmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics
p0118 A73-20001
Inter-hemispheric transfer of meaningful visual information in normal human subjects.
p0119 A73-20123
Single cell analysis of saturation discrimination in the macague.
p0129 A73-21568
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864
Correlation analysis of the bioelectrical activity of the brain during mental work
p0163 A73-23678
Role of the medial area of the medulla oblongata in the rhythmical activity of respiratory-center neurons
p0164 A73-23804
Cerebral temperature oscillations and vascular responses in man
p0164 A73-23805
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex
p0167 A73-24332
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing
p0194 A73-25143
Nitrogen metabolite dynamics in the brain during repeated hypothermia and subsequent spontaneous warming
p0207 A73-27703
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381

Characteristics of spontaneous oxygen tension variations in human brain structures
p0249 A73-30844
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Serotonin content in various parts of the brain during hibernation and awakening
p0278 A73-31390
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600
Brain alpha rhythm activity relationship to perceptual and motor performance, correlating with reaction time and computer cycle time analogy
p0287 A73-33159
Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
Techniques for microinjection of biologically active substances into subcortical structures of the brain
p0322 A73-36574
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep
p0345 A73-37394
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Brain calcium - Role in temperature regulation.
p0353 A73-38294
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801
Russian book - Role of the hypothalamus and the limbic system of the brain in regulating vegetative functions.
p0382 A73-40276
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
Russian book - Electrical activity of the human brain in the process of motor action.
p0389 A73-41289
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
Orbit and superior orbital fissure acoustic window for cranium posterior structures imaging by echoencephalographic techniques
p0402 A73-42667
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Anatomic and functional organization of the ventral anterior and reticular nuclei of the thalamus
p0429 A73-44675
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248
Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337
Electrophysiological sleep patterns of human and animal brains
[NASA-TT-F-740] p0257 N73-22023
Interdependence of slow and rapid brain waves during sleep
p0257 N73-22027
Somnofunctional mapping of deep brain waves in neurological patients
p0257 N73-22029
Bioelectric activity and excitability of cat brain structures during sleep phases
p0257 N73-22031
Bioelectric activity changes in brains of sleeping children caused by aging factor
p0257 N73-22032
Cone model for oxygen diffusion in brain considering spatial tissue/capillary permeability
[RAE-LIB-TRANS-1663] p0333 N73-26060
Effects of phosdrin on electrical brain potentials in squirrel monkeys
[FAA-AM-73-3] p0338 N73-27056
Equipment for implanting electrodes in subcortical structures of cat brain
[NASA-TT-F-15001] p0366 N73-27947
Relation between hyperbaric oxygenation and functional activity of differentiated brain with respect ot glutamic acid metabolism
p0368 N73-27960
Temperature interrelationships between rat brain tissues and cerebral blood supply
p0372 N73-29026
State of blood filling and bioelectric activity of grain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic vascular dysfunction
p0443 N73-33027
Various types of corticopetal influences from deep-seated emotiogenic formations of brain
p0449 N73-33068

BRAIN CIRCULATION
Studies of blood gas analysis at abnormal environment.
p0582 A73-11210
Airline flight and ground personnel fatigue and orthostatic hypotension syndrome manifested by variations in retinal arterial pressure and brain circulation
p0586 A73-12156
Modification of the electroencephalograph 4EEG-1 for polygraphy

p0154 A73-22370
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801
Book - The physiology of the cerebral circulation.
p0166 A73-23945
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies
p0193 A73-25041
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Xenon 133 measurement of cerebral volumetric circulation rates during papaverin and intensain vasodilation of canine and feline intercranial vessels, showing vessel resistance reduction
p0239 A73-29074
Temperature conditions and blood supply of the brain in animals
p0304 A73-34229
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man.
p0324 A73-36659
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence.
p0361 A73-39790
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202
Influence of altitude and drugs on cerebral circulation in smokers and non-smokers
p0229 N73-21125

BRAIN DAMAGE
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
Spatial analysis in monkeys of various ages after extirpation of the parietal areas of the cerebral cortex
p0167 A73-24329
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218
Pontine reticular formation as origin of neural mechanism generating saccades and nystagmus quick phases in horizontal plane, investigating effects of various brain lesions
p0316 A73-36436
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
Participation of cholinergic mechanisms in negative human emotions
p0362 A73-39799
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166

BRAIN STEM
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation
p0046 A73-13786
Patterns of reflex excitability during the ontogenesis of sleep and wakefulness.
p0052 A73-14264
Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem
p0118 A73-19650
Physiological mechanisms of evoked-potential habituation in the visual analysor
p0119 A73-20006
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434
Pontine reticular formation as origin of neural mechanism generating saccades and nystagmus quick phases in horizontal plane, investigating effects of various brain lesions
p0316 A73-36436
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448

BREATHING
NT HIGH ALTITUDE BREATHING
NT OXYGEN BREATHING
Formalization of certain functional aspects of the external respiration system
p0580 A73-10657
Effect of body temperature on ventilatory transients at start and end of exercise in man.
p0275 A73-31127
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415
Design and performance of breathing metabolic simulator
p0075 N73-13850
Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control
p0182 N73-19093
Physiological effects of argon/oxygen breathing on rats noting carbon dioxide level
p0182 N73-19094

BREATHING APPARATUS
NT OXYGEN MASKS
NT UNDERWATER BREATHING APPARATUS
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298
Space technology utilization for firefighters breathing equipment development, discussing design and field testing program [ASME PAPER 73-ENAS-24]
p0350 A73-37980
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408
Design and performance of demand regulated liquid breathing systems for mammalian respiration
p0252 N73-21976
Breathing apparatus for parachutists [AD-756554]
p0296 N73-24141
Decomposition of compounds adsorbed in charcoal of manned spacecraft breathing system [NASA-CR-134013]
p0415 N73-30092

BRIGHTNESS
Two stage mathematical model of brightness perception operation for stimuli having luminance field with asymmetric discontinuity
p0585 A73-12078
Influence of border and background on perception of straightness.
p0585 A73-12081
Foveal threshold additivity measurements for monochromatic and mixed light, using grating resolution as brightness criterion
p0246 A73-30398

BRIGHTNESS DISCRIMINATION
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Axiomatic formulation of a mathematical model for visual adaptation

p0579 A73-10655
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli
p0120 A73-20257
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
Analysis of transient visual sensations above the flicker fusion frequency.
p0129 A73-21566
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100
Manipulating the response criterion in visual monitoring.
p0247 A73-30499
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
Illuminance and albedo variations /whiteness constancy/ category judgments for stimuli with unpatterned and patterned surfaces
p0388 A73-41183
Bloch law error in visual perception of capacitor discharge brightness
[AD-749452] p0104 N73-14109
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] p0335 N73-26072
Visibility and optimum light characteristics of marks for sighting devices
p0374 N73-29039

BROMINE COMPOUNDS
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons
[AGARD-R-599] p0149 N73-17106

BRONCHI
Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data
p0577 A73-10169
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
A model of diffusion in the respiratory unit.
p0391 A73-41638
Gas transport in the human lung.
p0400 A73-42421

BROWNIAN MOVEMENTS
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828

BUBBLES
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
Effects of gas bubbles in decompression pathology of humans
[AD-748229] p0108 N73-15126

BUOYANCY
Microbiological investigation of neutral buoyancy simulator for weightless space environment testing
[NASA-TM-X-64736] p0229 N73-21127

BURNING
U COMBUSTION

BURNING PROCESS
U COMBUSTION

BURNING RATE
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532

BURNS (INJURIES)
Chorioretinal burn hazards of high intensity radiation sources in industry
p0145 N73-17071

BUTYRIC ACID
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons.
p0424 A73-43338

C

C-135 AIRCRAFT
Analysis of pilot performance in evaluating three types of aircraft altimeters during C-135B simulator flight
[ASD-TR-72-63] p0074 N73-13117

CABIN ATMOSPHERES
NT SPACECRAFT CABIN ATMOSPHERES
Habitable atmospheres which do not support combustion.
p0162 A73-23562
High altitude aircraft cabin pressurization for crews and passengers, discussing altitude tolerance, reaction times, decompression and oxygen equipment
p0251 A73-30937
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Skylab medical experiments altitude test /SMEAT/ chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992

CALCIUM
NT CALCIUM ISOTOPES
Heart function mechanism explanation by activation potential stimulation of muscular contraction via calcium ions
p0207 A73-27690
Effect of calcium-deficient diet on bone structure of pigs and dogs
[NASA-TT-F-13917] p0592 N73-10067
Computer controlled infusion pump for time varying input of calcium into physiological systems
[NASA-CASE-ARC-10447-1] p0101 N73-14092
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes
[AD-749323] p0258 N73-22035
Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] p0415 N73-30090
Effect of high ambient temperature on calcium content of human bone tissue
p0444 N73-33033

CALCIUM CARBONATES
NT ARAGONITE
Influence of blue green algae on crystalline calcium carbonate formation on river rocks
[NASA-TT-F-15028] p0375 N73-29046

CALCIUM CHLORIDES
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990

CALCIUM COMPOUNDS
NT ARAGONITE
NT CALCIUM CARBONATES
NT CALCIUM CHLORIDES

CALCIUM ISOTOPES
Calcium metabolism determination in rats by measuring argon isotope in exhaled air after neutron irradiation
[NASA-CR-128816] p0186 N73-19130

CALCIUM METABOLISM
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels.
p0077 A73-16151
Calcium movements and excitation-contraction coupling in cardiac cells.
p0198 A73-2560

Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981
Brain calcium - Role in temperature regulation.
p0353 A73-38294
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle.
p0385 A73-41130
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Calcium metabolism determination in rats by measuring argon isotope in exhaled air after neutron irradiation
[NASA-CR-128816] p0186 N73-19130

CALCIUM 45
U CALCIUM ISOTOPES

CALCULUS
NT FOURIER SERIES
NT VECTOR ANALYSIS

CALIBRATING
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
Design and performance of wideband artificial ear for calibrating audiometric earphones
[AD-746691] p0073 N73-13112
Calibrator for biaxial electronic platforms designed to measure postural equilibrium
[AD-763093] p0377 N73-29066

CALORIC STIMULI
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
Nystagmic response persistence to Fitzgerald-Hallpike caloric tests as function of directional cupular deflections due to head movement
p0238 A73-28510
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535
Differential thermal sensitivity in the human skin.
p0251 A73-30912

CALORIMETERS
Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies
p0049 A73-14123
Human calorimeter with a new type of gradient layer.
p0324 A73-36662
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054

CALORIMETRY
U HEAT MEASUREMENT

CALVES
Inhibiting and activating effect of mono- and bi-quaternary pyridioxide reactivators on bovine erythrocyte cell membrane
[BMVG-FBWT-72-9] p0187 N73-19138

CANADA
Color vision requirements of Canadian Armed Forces, including their standard tests
p0179 N73-19070

CANCER
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination.
p0194 A73-25136

Rotating target providing high yield neutrons by He-4 reaction for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067
Routine proctosigmoidoscopic examinations of asymptotic NASA personnel for cancer prevention
p0144 N73-17061

CANTILEVER WINGS
U WINGS

CAPACITANCE
Cardiac membrane capacitance physiological properties and measurements in Purkinje fibers, ventricular and atrial muscles and heart tissues
p0197 A73-25596

CAPACITORS
Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] p0232 N73-21151

CAPE KENNEDY LAUNCH COMPLEX
Hand book on ionizing radiation protection policies at Kennedy Space Center
[NASA-TM-X-69410] p0186 N73-19133
Environmental sanitation handbook for occupational medicine and health procedures at Kennedy Space Center
[NASA-TM-X-69522] p0440 N73-32020

CAPILLARIES (ANATOMY)
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.
p0056 A73-14649
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064

CAPILLARY CIRCULATION
U CAPILLARY FLOW

CAPILLARY FLOW
A criterion for oxygen supply optimality in tissues and the capillary circulation rate
p0047 A73-13821
Significance of the Bohr and Haldane effects in the pulmonary capillary.
p0129 A73-21614
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786

CAPSULES (SPACECRAFT)
U SPACE CAPSULES

CARBOHYDRATE METABOLISM
NT HYPOGLYCEMIA
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500
Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta
p0193 A73-25042
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence

that the responses were in part hormone-dependent.
p0196 A73-25568
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Energy supply in acute cold-exposed dogs.
p0324 A73-36655
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes.
p0386 A73-41139
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622
Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671
Lactate origins and renewal in blood plasma, considering metabolism, enzymatic resynthesis and final excretion in urine
p0434 A73-45157
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
Mathematical model for in vivo study of glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826] p0216 N73-20093

CARBOHYDRATES
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT CELLULOSE
NT CHOLINE
NT DEXTRANS
NT GLUCOSE
NT GLUCOSIDES
NT GLYCOGENS
NT HEXOKINASE
NT MONOSACCHARIDES
NT NUCLEOSIDES
NT RIBOSE
NT STARCHES
NT SUCROSE

CARBON
NT CHARCOAL

CARBON COMPOUNDS
NT ARAGONITE
NT CALCIUM CARBONATES
NT CARBONATES
NT SODIUM CARBONATES

CARBON DIOXIDE
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972
Oxygen, carbon dioxide, nitrogen, and noble gases for environment suitable for humans
p0104 N73-15093
Atmospheric control studies, emphasizing carbon dioxide problem
p0106 N73-15108
Change in content of gases in blood when man is exposed to high ambient temperatures
p0217 N73-20105
Development of design information for molecular sieve sorbants regenerative CO2-removal systems for manned spacecraft
[NASA-CR-2277] p0366 N73-27948

CARBON DIOXIDE CONCENTRATION
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337
Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes
p0096 A73-18577
Changes in microvascular diameter and oxygen tension induced by carbon dioxide.
p0200 A73-26116
Effect of acute exposure to CO2 on lung mechanics in normal man.
p0200 A73-26216
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711
Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence
p0343 A73-37197
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068
Physiological effects of argon/oxygen breathing on rats noting carbon dioxide level
p0182 N73-19094
Toxicological aspects of carbon dioxide exposure in chronic hypercapnia
[AD-763394] p0418 N73-31005

CARBON DIOXIDE REMOVAL
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951
Hydrogen depolarized cell for removing CO2 in spacecraft life support systems
[NASA-CR-131868] p0259 N73-22047
Cost estimates for carbon dioxide concentrators in spacecraft life support systems
[NASA-CR-124302] p0340 N73-27073
Regenerable CO2 sorbent formulation and fabrication for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
Alkali metal carbonate-bicarbonate solid gas reaction for removing CO2 from atmosphere of EVA life support system
[NASA-CR-114661] p0420 N73-31013
Systems design for amine carbon dioxide sorber bed to be used in manned spacecraft
[NASA-CR-111849] p0420 N73-31018
Cost data for modified hydrogen depolarized carbon dioxide concentrator in life support system
[NASA-CR-124462] p0447 N73-33052

CARBON DIOXIDE TENSION
NT HYPERCAPNIA
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Gas dynamic theory of gas exchange in organisms based on oxygen and carbon dioxide permanent partial pressure gradients in tissues, blood and lungs
p0169 A73-24523
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction.
p0169 A73-24565
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534

Method of PaCO2 determination in men with functional disorders of external respiration p0239 A73-29075
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m. p0251 A73-30911
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures. p0284 A73-32650
Correlation of ventilatory responses to hypoxia and hypercapnia. p0359 A73-39776
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2. p0359 A73-39777
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence. p0361 A73-39790
External airway resistance effects on ventilation and carbon dioxide response during human steady state exercise p0400 A73-42417
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator p0402 A73-42665

CARBON MONOXIDE
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment p0208 A73-27712
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man. p0324 A73-36659
Compact carbon monoxide sensor utilizing a confocal optical cavity. [ASME PAPER 73-ENAS-20] p0350 A73-37976
Oxygen, carbon monoxide, and fuel toxicity p0105 N73-15101
Acute toxicity of brief exposures to HF, HCl, NO2, and HCN singly and in combination with CO in aircraft cabins [AD-751442] p0139 N73-16085
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear p0217 N73-20106
Hyperoxic atmosphere effect on rat metabolism and elimination of gaseous wastes p0254 N73-22004
Physiological and hemodynamic adaptations to CO levels and exercise in nonsmoking normal men [PB-213834/1] p0267 N73-23073
Effect of carbon monoxide on time perception [PB-214651/2] p0299 N73-25123
Influence of continuous and discontinuous exposure to carbon monoxide on animals p0442 N73-33019

CARBON MONOXIDE POISONING
Myocardial metabolism during exposure to carbon monoxide in the conscious dog. p0159 A73-22935
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide p0280 A73-31519
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army p0329 A73-36929
Erythropoietin production in dogs exposed to high altitude and carbon monoxide. p0358 A73-39599
Effect of carbon monoxide on time perception. p0381 A73-40000
Effects of single exposures of carbon monoxide on sensory and psychomotor response. p0383 A73-40409
Hypokinetic disturbances of rats after exposure to carbon monoxide p0255 N73-22007
Tolerance of hypokinetic rats to carbon monoxide exposure p0264 N73-23043

CARBON TETRAFLUORIDE
Habitable atmospheres which do not support combustion. p0162 A73-23562

CARBONACEOUS METEORITES
Chemical evolution before life deduced from carbonaceous meteorites composition, noting porphyrins, optically active substances and isoprenoid hydrocarbons p0243 A73-30130

CARBONATES
NT ARAGONITE
NT CALCIUM CARBONATES
NT SODIUM CARBONATES
Alkali metal carbonate-bicarbonate solid gas reaction for removing CO2 from atmosphere of EVA life support system [NASA-CR-114661] p0420 N73-31013

CARBOXYHEMOGLOBIN
Myocardial metabolism during exposure to carbon monoxide in the conscious dog. p0159 A73-22935
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment p0208 A73-27712
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man. p0324 A73-36659
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear p0217 N73-20106

CARBOXYHEMOGLOBIN TEST
Significance of the Bohr and Haldane effects in the pulmonary capillary. p0129 A73-21614
Effects of single exposures of carbon monoxide on sensory and psychomotor response. p0383 A73-40409

CARBOXYLIC ACIDS
NT LACTIC ACID
NT LYSINE
NT TRYPTOPHAN

CARCINOGENS
An experimental basis for carcinogenic effects of ultraviolet radiation. p0203 A73-26485

CARCINOMA
U CANCER

CARDIAC AURICLES
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times. p0057 A73-14767
Ultrastructure of the atrial, ventricular, and Purkinje cell, with special reference to the genesis of arrhythmias. p0097 A73-18873
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle. p0125 A73-21215
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions p0198 A73-25598
Stethoscope- or phonocardiograph-detectable systole-associated left atrial sound in terms of activity recording, sound genesis, hemodynamic correlations and clinical applications p0199 A73-25696
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm. p0199 A73-25699
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction. p0201 A73-26287
Electrocardiographic diagnosis of sinus node rhythm variations and SA block. p0319 A73-36520
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias. p0319 A73-36525
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry. p0348 A73-37795
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.

p0399 A73-42341
CARDIAC VENTRICLES
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506
Left ventricular end-diastolic pressures following selective coronary arteriography.
p0583 A73-11508
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870
Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872
Ultrastructure of the atrial, ventricular, and Purkinje cell, with special reference to the genesis of arrhythmias.
p0097 A73-18873
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804
Estimation of left ventricular size by echocardiography.
p0159 A73-22999
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter.
p0159 A73-23173
Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843
Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy
p0168 A73-24514
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions
p0198 A73-25598
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699
Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051
Echocardiography status, potentialities and requirements in congenital heart disease diagnosis, considering feasibility in left ventricular performance evaluation
p0243 A73-30053
Book on echocardiography covering examination of mitral, aortic, tricuspid and pulmonic valves, ventricles, atrium, pericardial effusion, coronary artery disease and tumors
p0245 A73-30358
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522

The clinical causes and mechanisms of intraventricular conduction disturbances. p0319 A73-36524
Current status of correlations between vectorcardiogram and hemodynamic data. p0319 A73-36526
Respiratory changes in the stroke volume of the left ventricle in healthy humans p0345 A73-37397
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry. p0348 A73-37795
Use of a video system in the study of ventricular function in man. p0348 A73-37797
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle. p0348 A73-37798
A new technique for the study of left ventricular pressure-volume relations in man. p0353 A73-38259
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications. p0353 A73-38866
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance. p0354 A73-38868
Detection of left ventricular asynergy by echocardiography. p0354 A73-38869
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals. p0358 A73-39603
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man. p0390 A73-41564
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress. p0390 A73-41565
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data. p0394 A73-41961
A simple cardiac contractility computer. p0403 A73-42677
Structural conditions in the hypertrophied and failing heart. p0403 A73-42685
Nature and significance of alterations in myocardial compliance. p0404 A73-42689
Polyparametric information of the electrocardiogram in injured tissue. p0405 A73-42834
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972. p0405 A73-42856
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity. p0424 A73-43492
Stroke volume measurement from an integral rheogram of human body p0429 A73-44719
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities. p0436 A73-45400
Gaussian curve simulation of multiple-dipole model of ventricular depolarization [TH-71-E-25] p0067 N73-12116

CARDIOGRAMS
Mechanisms of cardiac arrhythmias - From hypothesis to physiologic fact. p0347 A73-37582
Russian book - Integral topograms of heart potentials. p0401 A73-42489

CARDIOGRAPHY
NT BALLISTOCARDIOGRAPHY
NT ECHOCARDIOGRAPHY
NT ELECTROCARDIOGRAPHY
NT PHONOCARDIOGRAPHY
Left ventricular end-diastolic pressures following selective coronary arteriography. p0583 A73-11508
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography. p0583 A73-11509
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields. p0053 A73-14289
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times. p0057 A73-14767
Evaluation of the state of the cardiovascular system from polycardiographic test data p0088 A73-17749
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms. p0115 A73-19124
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects. p0118 A73-19932
Pattern of blood flow within the heart - A stable system. p0125 A73-21214
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography. p0130 A73-21801
Ventriculographic patterns and hemodynamics in primary myocardial disease. p0130 A73-21804
Video instrumentation for radionuclide angiocardiography. p0348 A73-37796
Measuring characteristics of the displacement cardiograph. p0403 A73-42676
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971. p0404 A73-42826
Indications and value of coronary arteriography. p0405 A73-42830
The value of different angiographic procedures in coronary heart disease. p0405 A73-42831
Ischemic polarcardiographic changes induced by exercise - A new criterion. p0432 A73-44946

CARDIOLOGY
Fingerprint patterns incidence relation in congenital vitium cordis patients, using Henry dactyloscopic classification p0581 A73-11080
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity p0588 A73-12467
Unusual diastolic heart beat in pericardial effusion. p0041 A73-13059
Evaluation of cardiac performance in exercise. p0043 A73-13539
Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening p0056 A73-14660
Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches. p0115 A73-19152
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load. p0118 A73-19931
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man. p0122 A73-20369
Papers on cardiac electrophysiology covering heart cells, membrane mechanism, molecular structure, excitation-contraction coupling, muscular ion transport, synaptic and atrioventricular

transmissions, healing, etc
p0197 A73-25588
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
Book - Atherosclerosis and coronary heart disease.
p0320 A73-36531
Localizing factors in experimental atherosclerosis.
p0320 A73-36536
Problems in the recognition of angina pectoris.
p0321 A73-36541
Dynamic electrocardiographic standardization for detecting cardiac risk factor in personnel
p0145 N73-17066
Long term exercise effects on cardiovascular response in NASA personnel with periodic ergometric evaluation
p0145 N73-17067

CARDIOTACHOMETERS
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
Development of electrocardiogram protection circuits to prevent accidental electrocution and digital cardiotachometer system to display heart rate
p0261 N73-22924
Measurement of arterial pressure by tachooscilloscope method
[NASA-TT-P-15088] p0439 N73-32016

CARDIOVASCULAR SYSTEM
NT AORTA
NT ARTERIES
NT BLOOD VESSELS
NT CAPILLARIES (ANATOMY)
NT CARDIAC AURICLES
NT CARDIAC VENTRICLES
NT DIASTOLE
NT EOSINOPHILS
NT ERYTHROCYTES
NT GLOMERULUS
NT HEART
NT HEMATOPOIESIS
NT HEMATOPOIETIC SYSTEM
NT LYMPHOCYTES
NT MYOCARDIUM
NT RETICULOCYTES
NT SYSTOLE
NT VEINS
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license
p0582 A73-11238
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
Telemetry of cardiovascular parameters on fighter aircraft flying pilots.
p0055 A73-14309
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions
p0087 A73-17689
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124
Sinus venosus atrial septal defect - Analysis of fifty cases.
p0121 A73-20368
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987
High altitude acclimatization and mountain climbing effects on human organism, considering oculomotor, cardiovascular and respiratory responses and endurance
p0124 A73-20991
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365
Distribution of systemic blood flow during cardiopulmonary bypass.
p0158 A73-22930
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
The role of vestibulometry in medical evaluation of flight personnel
p0165 A73-23821
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
Hemodynamics alteration caused by acute hypoxia in animals with denervated carotid sinuses
p0236 A73-28350
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Lipids in arteriosclerotic arterial tissues of man.
p0320 A73-36534
Localizing factors in experimental atherosclerosis.
p0320 A73-36536
Localizing factors in arteriosclerosis.
p0320 A73-36537
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses
p0322 A73-36578
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.

p0328 A73-36915
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Circulatory reflexes from mechanoreceptors in the cardio-aortic area.
p0384 A73-40637
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
Cardiopulmonary responses of male and female swine to simulated high altitude.
p0432 A73-45058
High altitude effects on cerebral and cardiovascular systems of monkeys
[AD-745891] p0610 N73-11085
Effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-129603] p0063 N73-12074
Standard requirements for ultrasonic Doppler probes of cardiovascular systems in medical monitoring functions
p0063 N73-12083
Transverse acceleration effects on human cardiovascular system
p0064 N73-12088
Flight stress effects on cardiovascular reactions of pilots with atherosclerosis
p0064 N73-12090
Feasibility of multichannel rheography for studying cardiovascular system on centrifuge
p0065 N73-12094
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications
[AD-751425] p0140 N73-16090
Cardiovascular effects of fluorocarbon exposure, emphasizing epinephrine sensitivity
[AD-751427] p0140 N73-16091
Cardiovascular and respiratory systems reactions in cosmonauts during space flight
p0180 N73-19079
Technology transfer of biomedical data for use in research of cardiovascular diseases
[NASA-CR-131246] p0211 N73-20053
Techniques for determining effects of prolonged weightlessness on cardiovascular system of subhuman primates
[NASA-CR-131890] p0252 N73-21980
Distribution parameter model for acceleration forces acting on arterial system
[AD-756530] p0294 N73-24128
Instrumentation and techniques for determining effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119
Lower body decompression effects on human cardiovascular hemodynamic system
p0373 N73-29032
Fluid dynamic aspects of cardiovascular behavior during low frequency whole-body vibration such as encountered by astronauts during launch and reentry
[NASA-CR-133843] p0412 N73-30069
Evaluation of energy expenditures and reactions of cardiovascular and respiratory systems to physical work
[NASA-TT-F-15090] p0437 N73-31997
Measurement of arterial pressure by tachooscilloscope method
[NASA-TT-F-15088] p0439 N73-32016
Role of extracardial innervation in compensation of orthostatic load
p0443 N73-33023
Mathematical model and digital computer simulation of cardiovascular control system response to ergometer exercise
p0446 N73-33049

CARGO AIRCRAFT
NT C-135 AIRCRAFT

CARIBBEAN SEA
Marine biology literature compilation for Caribbean Sea and adjacent regions
p0261 N73-23022
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023

CAROTENE
Chemotaxionomic survey of carotenoid pigments in several species and groups of Basidiomycetes
[NASA-TT-F-14858] p0219 N73-20117

CAROTID SINUS REFLEX
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475
Hemodynamics alteration caused by acute hypoxia in animals with denervated carotid sinuses
p0236 A73-28350
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Circulatory reflexes from mechanoreceptors in the cardio-aortic area.
p0384 A73-40637
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries
p0429 A73-44720

CARRIER MOBILITY
NT ELECTRON MOBILITY

CARTRIDGE ACTUATED DEVICES
U ACTUATORS

CASCADES (FLUID DYNAMICS)
U FLUID DYNAMICS

CASCODE MOSFET
U FIELD EFFECT TRANSISTORS

CASE HISTORIES
Case histories of valvular cardiopathies in military pilots, determining tolerance to flight
p0115 A73-19209
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Multiphase health screening and medical history questionnaire for preventive/occupational physical examinations
p0143 N73-17052
Automated medical history questionnaire for screening industrial personnel and scheduling physical examinations
p0144 N73-17060
Periodic health examinations and automatic processing of medical histories for detection and prevention of human diseases
p0145 N73-17074
Automated medical record system for identifying and managing medical problems for Navy

p0147 N73-17087
Articles on methodology and historical importance of scientific research in creativity
[TT-70-57147-2] p0413 N73-30075
CASES (CONTAINERS)
Manipulator kinematics in selecting geometrical shapes of containers and chambers
p0336 N73-26087
CATABOLISM
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
DNA catabolism in rat tissues in response to transverse accelerations
p0087 A73-17679
Thermal factor and dehydration influences on protidic and lipidic catabolisms of young men with partial food deprivation in hot climate, discussing metabolic balances
p0125 A73-21248
Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver
p0063 N73-12080
Human circadian rhythms of blood circulation, respiration and catabolism under flight simulation stress
[DLR-FB-72-49] p0413 N73-30073
CATALASE
Gas environment effect on catalase cryolysis
p0185 N73-19121
CATALYTIC ACTIVITY
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Solvent effects on enzymes - Implications for extraterrestrial life.
p0091 A73-17948
Effects of experimental conditions on parameter estimated when using the Hill model
p0153 A73-21872
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels
p0383 A73-40372
Proton magnetic resonance spectra of ribonuclease A inhibitor complexes, noting effect on catalytic activity
[BMVG-FBWT-72-13] p0137 N73-16074
CATAPULTS
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
CATARACTS
Management of cataract in commercial flight personnel.
p0329 A73-36927
Literature review of experimental studies to assess relationship of exposure to microwaves and subsequent development of cataracts
[UR-3490-103] p0107 N73-15123
CATECHOLAMINE
NT EPINEPHRINE
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498
The role of biogenic amines in sleep.
p0051 A73-14260
Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
Relative rates of arterial lactate and oxygen-deficit accumulation in hypoxic dogs.
p0281 A73-31922
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease
p0405 A73-42837
Extraction and analysis by gas-liquid chromatography of catecholamine metabolites from biological tissue
[AD-745944] p0066 N73-12105
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators
p0174 N73-18111
CATHETERIZATION
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160
CATHODE RAY TUBES
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Human factors aspects in aircraft electronic display systems, discussing cathode ray tubes /CRT/ and light emitting diodes /LED/ applications and characteristics
p0204 A73-26500
A visual stimulator employing a T.V. raster display.
p0246 A73-30400
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666
CATIONS
NT FERRIC IONS
NT METAL IONS
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
CATS
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
Dynamic response of vestibular nuclei neurons of decerebrated cats subjected to sinusoidal rotation
[AMRU-R-70-2] p0606 N73-11059
Asymmetric response of cat semicircular canal neurons to symmetric sinusoidal rotation
[AMRU-R-69-2] p0607 N73-11060
Physiological response of cat semicircular canal dependent units to linear acceleration without angular acceleration
[AMRU-R-70-4] p0607 N73-11061
Mechanical response of otolith-dependent units of cats to sinusoidal linear acceleration
[AMRU-R-69-3] p0608 N73-11068
Effects of intraperitoneally administered hydrazine on electrophysiology, general behavior, and performance of cats
[AD-746014] p0609 N73-11081
Monomethylhydrazine effects on evoked cerebral neuroelectric responses in unanesthetized cat
[AD-746302] p0610 N73-11082
Respiratory impedance effects on electrical activities of bulbar respiratory neurons, respiratory muscles, and pulmonary ventilation in anesthesized cats
p0064 N73-12084
Semicircular canal plugging response in cats to rotary stimulation
p0111 N73-15151
Bioelectric activity and excitability of cat brain structures during sleep phases
p0257 N73-22031

Behavioral learning response of cat to electric stimulation of auditory nervous system [NASA-CR-132047] p0293 N73-24124
Equipment for implanting electrodes in subcortical structures of cat brain [NASA-TT-P-15001] p0366 N73-27947
CELESTIAL BODIES
NT CARBONACEOUS METEORITES
NT EARTH (PLANET)
NT EXTRASOLAR PLANETS
NT JUPITER (PLANET)
NT MARS (PLANET)
NT MOON
NT NATURAL SATELLITES
NT SOLAR SYSTEM
NT SUN
CELL DIVISION
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity. p0589 A73-12565
Mitotic activity in dorsal epidermis of Rana pipiens. p0122 A73-20456
CELLS (BIOLOGY)
NT AXONS
NT CARBOXYHEMOGLOBIN
NT CHROMOSOMES
NT COLLAGENS
NT EOSINOPHILS
NT ERYTHROCYTES
NT GAMETOCYTES
NT HEMATOPOIESIS
NT HEMOGLOBIN
NT LYMPHOCYTES
NT MACROPHAGES
NT MITOCHONDRIA
NT NEURONS
NT OXYHEMOGLOBIN
NT RETICULOCYTES
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes. p0579 A73-10625
Neuron networks modeling from viewpoint of intracellular and cell-medium interaction, discussing coding properties and nonsingular self adjusting system response p0579 A73-10652
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area p0583 A73-11503
Cation exchange binding of rubidium and cesium by rat liver cell microsomes. p0588 A73-12549
Resistance of soil microorganisms to starvation. p0589 A73-12627
Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation p0047 A73-13824
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode p0056 A73-14647
Circadian rhythms - Subcellular and biochemical aspects. p0089 A73-17824
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus p0090 A73-17929
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2. p0090 A73-17944
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations. p0090 A73-17945
Comparative anatomy of the vestibular nuclear complex in submammalian vertebrates. p0096 A73-18575

Ultrastructure of the atrial, ventricular, and Purkinje cell, with special reference to the genesis of arrhythmias. p0097 A73-18873
Rabbit hippocampal neuron activity relation to theta-wave phases from cell potential and extracellular recording analyses p0118 A73-20005
Single cell analysis of saturation discrimination in the macaque. p0129 A73-21568
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/. p0130 A73-21806
Vertebrate photoreceptor cell /rods and cones/ development and structure, discussing light pathway, ciliary connective and microtubules, outer and inner segments, etc. p0160 A73-23303
Light evoked responses in invertebrate photoreceptor cells, considering cell organization, microvilli, lateral eye of Limulus, generator potentials, visual responses, etc p0160 A73-23307
Light evoked changes in potential difference between inside and outside of cells in Limulus ommatidia, describing multistage model of generator potential p0160 A73-23309
Receptive fields of retinal ganglion cells. p0161 A73-23315
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells p0163 A73-23681
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles p0165 A73-23810
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination. p0194 A73-25136
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing p0194 A73-25143
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions p0197 A73-25589
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships p0197 A73-25590
Cardiac action potential rising phase and generation mechanism, discussing pacemaker potential and slow depolarization initiating upstroke in spontaneously active cardiac cells p0197 A73-25592
Ionic current mechanisms for cardiac muscle repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies p0197 A73-25593
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport p0197 A73-25594
Calcium movements and excitation-contraction coupling in cardiac cells. p0198 A73-25601
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes p0202 A73-26482
Automatic microscopy for mitotic cell location. p0206 A73-27144
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation p0208 A73-27708
Responses of indigenous microorganisms to soil incubation as viewed by transmission electron

microscopy of cell thin sections.
p0241 A73-29724
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599
Russian book - Primary and initial processes of the biological action of radiation.
p0312 A73-35896
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
Biodegradation from evolution viewpoint as physiological function and fundamental cellular process regulating biological equilibrium, explained by intracellular digestion and phagocytic cells association
p0385 A73-41024
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments
p0398 A73-42183
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
Complete activity of lactate dehydrogenase and isoenzymes in plasma and myeloid cells
[NASA-TT-F-14586] p0592 N73-10070
Simulated high altitude determination of interrelation of systematic and cellular responses to acute and chronic hypoxia
[AD-743536] p0594 N73-10081
Energy comparisons for lethal doses of gamma radiation and visible light with energy of basal cell metabolism
[AD-746750] p0072 N73-13102
Internally deposited radioisotope effects on cell populations in mammals
[NYO-3970-29] p0099 N73-14074
Cellular activation energy effect in rat tolerance to acceleration stress
[AD-749338] p0100 N73-14079
Transverse acceleration effects on rat hepatocytic structures
p0181 N73-19086
Thalamic cat cell activities during sleep and wakefulness phases
p0257 N73-22030
Physiological regeneration of corneal epithelial mice cells exposed to strong magnetic fields
p0263 N73-23034
Mechanisms of oxygen toxicity at cellular level
[AD-758725] p0299 N73-25124
Single body theory for weightlessness simulation, applied to simple cell model
p0368 N73-27961
Microscopic morphological changes in dog cardiac muscle after chronic gamma irradiation
p0372 N73-29027
Biological evaluation of influence of helium-oxygen atmosphere on culture of mammalian cells
p0443 N73-33024

CELLULOSE
Biodegradation of cellulose fibers and reclamation of single cell protein from refuse through fermentation process
[NASA-CR-130300] p0106 N73-15115

CENS SYSTEM
U CENTRAL ELECTRONIC MANAGEMENT SYSTEM

CENTER OF GRAVITY
Mass, volume, center of mass, and mass moment of intertia determined for head and neck of human body
[AD-762581] p0377 N73-29065

CENTRAL ELECTRONIC MANAGEMENT SYSTEM
Human factors in design of aircraft in-flight monitoring and automatic landing system for low weather operation
p0270 N73-23901

CENTRAL NERVOUS SYSTEM
NT BRAIN
NT BRAIN STEM
NT CEREBELLUM
NT CEREBRAL CORTEX
NT CEREBRUM
NT HIPPOCAMPUS
NT SPINAL CORD
NT SPINE
NT THALAMUS
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
The role of biogenic amines in sleep.
p0051 A73-14260
Influence of different motor regimes on the convulsive reactivity of the central nervous system.
p0085 A73-17178
Information processing in the visual system.
p0122 A73-20374
Central nervous system stresses effects estimation, discussing ocular positioning movements functional significance and psychological processes
p0128 A73-21542
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint
p0166 A73-23943
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079
Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567
Physical and psychological effects of electromagnetic fields on human and animal central nervous system
p0248 A73-30571
RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system
p0249 A73-30842
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Cholinergic activation of vestibular neurones leading to rapid eye movements in the

mesencephalic cat.
p0316 A73-36439
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930
The problem of spiritual requirements and the theory of human higher nervous activity
p0362 A73-39796
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429
Lesions of nervous system and vascular embolisms in decompression sickness
[AD-743330] p0593 N73-10076
Clinical study of 56 cases with neurological symptoms in decompression sickness
[AD-744298] p0594 N73-10086
Monomethylhydrazine effects on evoked cerebral neuroelectric responses in unanesthetized cat
[AD-746302] p0610 N73-11082
High altitude effects on cerebral and cardiovascular systems of monkeys
[AD-745891] p0610 N73-11085
End organs, central nervous system connections, and static and dynamic characteristics of vestibular system
p0105 N73-15103
Syringomyelia in central nervous system affecting flying fitness
p0266 N73-23061
Impact acceleration effects on rabbit central nervous system
p0372 N73-29024

CENTRAL NERVOUS SYSTEM DEPRESSANTS
Effects of antimotion sickness drugs, placebos, and secobarbital on postural equilibrium functions at sea level and at simulated altitudes of 12,000 feet
[AD-748192] p0103 N73-14105
Alcohol reference method for predicting drug modifications of central nervous system activity and pilot performance decrease
p0227 N73-21112

CENTRAL NERVOUS SYSTEM STIMULANTS
Conditioned reflex learning and phenamine-stimulated functional activation of cerebral synaptic, protein synthesizing and energy generating apparatus
p0085 A73-17177
Hashish' smoking effects on human oxygen consumption during physical stress and safe driving ability
p0228 N73-21115

CENTRIFUGAL FORCE
Human performance, physiological effects, and pathological effects of rotary acceleration
p0105 N73-15096

CENTRIFUGES
NT HUMAN CENTRIFUGES
Seat reaction direction in an animal centrifuge.
p0116 A73-19478

CENTRIFUGING
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503
Ultracentrifugation of biological materials
[NASA-CR-114673] p0438 N73-32009

CENTRIFUGING STRESS
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Some aversive characteristics of centrifugally generated gravity.
p0238 A73-28506
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
Normalisation of haemodynamic changes caused by action of prolonged accelerations in rats.
p0314 A73-35985
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests
p0327 A73-36904
Gravitational effects on animal ontogeny from centrifugation studies of acceleration tolerance, considering egg and embryo development, body composition, etc
p0397 A73-42174
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071
Centripetal acceleration for inhibiting cerebellar rat cortex activity
p0262 N73-23030

CERAMAL PROTECTIVE COATINGS
U PROTECTIVE COATINGS

CERAMICS
Electrically conducting ceramics to heat biowaste propellants to 2000 K in resistojet thrustors for space station application
[NASA-CR-112159] p0112 N73-15161
Chemical and orthopedic properties of ceramic bone implants in monkeys
[AD-754982] p0221 N73-20134

CEREBELLUM
Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development
p0051 A73-14256
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
Anatomo-functional bases of cerebello-cerebral interrelations
p0282 A73-32287
Intervention of cerebello-cortical and cortico-cerebellar paths in the organization and regulation of movement
p0282 A73-32288
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447

On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202

CEREBRAL CORTEX
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082
Y-chromosome localization in the interphase nuclei of cerebral neurons in man
p0582 A73-11444
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions
p0046 A73-13764
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
Cerebral circulation alteration during hypothermia
p0081 A73-16698
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funiculs of the cat spinal cord
p0118 A73-20002
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004
Cerebral localization of speech, discussing cortical lesions, aphasia and mental activity correlation theories
p0126 A73-21425
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579
Biopotential alpha and theta rhythms of neocortex and hippocampus of milk drinking cats after food and water deprivation
p0157 A73-22862
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Spatial analysis in monkeys of various ages after extirpation of the parietal areas of the cerebral cortex
p0167 A73-24329
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
Memory process in terms of cortex-subcortex interrelation, brain lability level and biopotential trace processes
p0194 A73-25198
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Comparative analysis of the electrical activity of the cortex and of cerebral subcortical formations in the process of the alteration of conditioned reactions
p0205 A73-27104
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity
p0242 A73-29990
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Anatomo-functional bases of cerebello-cerebral interrelations
p0282 A73-32287
Intervention of cerebello-cortical and cortico-cerebellar paths in the organization and regulation of movement
p0282 A73-32288
The visual cortex as a spatial frequency analyser.
p0308 A73-34840
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Stereoscopic vision - Cortical limitations and a disparity scaling effect.
p0312 A73-35922
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755

Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram p0348 A73-37939
Functional characteristics of different neurons in the auditory cortex p0349 A73-37940
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus. p0356 A73-39146
Visually evoked cortical potentials to patterned stimuli in monkey and man. p0359 A73-39760
Role of associations in the formation of evoked potentials from the human cerebral cortex p0362 A73-39798
Functional properties of auditory cortex neurons in a controlled experiment p0362 A73-39802
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex p0384 A73-40750
Biosynthesis of RNA in the brain cortex during various functional states p0389 A73-41262
Russian book - Electrical activity of the human brain in the process of motor action. p0389 A73-41289
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex p0394 A73-41958
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents p0401 A73-42652
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities p0401 A73-42653
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters. p0407 A73-42958
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons. p0424 A73-43338
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation p0428 A73-44550
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep p0429 A73-44718
Application of factor analysis to the encephalographic characterization of sleep p0430 A73-44722
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio p0434 A73-45159
Dynamics of some characteristics of induced potential of optical region in cerebral cortex in rabbits with increasing hypoxia p0217 N73-20103
Bioelectrical activity differentiations in cat cortex during sleep inhibition p0257 N73-22026
Centripetal acceleration for inhibiting cerebellar rat cortex activity p0262 N73-23030
Comparison of electroencephalographic response patterns in man and monkeys to visually evoked cortical stimuli [IZF-1972-24] p0264 N73-23049

CEREBROSPINAL FLUID
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys [AD-751232] p0140 N73-16092

CEREBRUM
Inhibitive mechanisms activity in behavior control by neostriatum, discussing suppressive reactions, evoked sleep, conditioned and instrumental reflexes and neurophysiological aspects p0581 A73-11025
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels. p0077 A73-16151
Functional state of various portions of the cerebrum under the action of extremal stimulation p0084 A73-16736
Some physiological reactions to acceleration in albino rats in a state of hypothermia p0084 A73-16737
Conditioned reflex learning and phenamine-stimulated functional activation of cerebral synaptic, protein synthesizing and energy generating apparatus p0085 A73-17177
Ontogenic cerebrospinal reflex activity studies, covering spinal cord morphology, reflex arches, inhibition, intracentral responses and post-tetanic potentiation p0121 A73-20366
Fatique levels of cerebral hemispheres in response to visual task and test stimuli, noting left hander reduced performance capacity p0157 A73-22925
Book - The physiology of the cerebral circulation. p0166 A73-23945
Functional and morphological structures of motor activity events, noting central integration ensemble of cerebrum transmitter sequences p0194 A73-25200
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors p0199 A73-26086
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence. p0361 A73-39790
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man p0401 A73-42656
Monomethylhydrazine effects on evoked cerebral neuroelectric responses in unanesthetized cat [AD-746302] p0610 N73-11082
Dynamics of nitrogenous cerebral metabolites accompanying repeated hypothermia and subsequent self-heating p0216 N73-20097
Influence of altitude and drugs on cerebral circulation in smokers and non-smokers p0229 N73-21125
Changes in human cerebral circulation during prolonged bed rest test p0256 N73-22020
Circadian rhythms of sleep and cerebral temperature in rats chronically exposed to hot environments [NASA-TT-F-15082] p0417 N73-30994

CESIUM ION
Cation exchange binding of rubidium and cesium by rat liver cell microsomes. p0588 A73-12549

CESSNA MILITARY AIRCRAFT
U MILITARY AIRCRAFT

CHAIRS
U SEATS

CHALCOGENIDES
NT BERYLLIUM OXIDES
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT HYDROGEN PEROXIDE
NT INORGANIC SULFIDES
NT MANGANESE OXIDES
NT NITROGEN OXIDES
NT PEROXIDES
NT POTASSIUM OXIDES
NT SULFUR OXIDES

CHANCE-VOUGHT MILITARY AIRCRAFT
U MILITARY AIRCRAFT

CHAPMAN-JOUGET FLAME
U CHEMICAL EQUILIBRIUM

CHARACTER RECOGNITION
Double cross-validation of video cartographic symbol location performance. p0082 A73-16719

Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence. p0239 A73-29123
Factors affecting processing mode in visual search. p0311 A73-35493
Searching for many targets - An analysis of speed and accuracy. p0311 A73-35498
Visual search, complex backgrounds, mental counters, and eye movements. p0388 A73-41185
Effect of exercise on the response time in an identification problem p0394 A73-41894

CHARACTERISTIC EQUATIONS
U EIGENVECTORS
CHARACTERISTIC FUNCTIONS
U EIGENVECTORS
CHARACTERS
U SYMBOLS
CHARCOAL
Decomposition of compounds adsorbed in charcoal of manned spacecraft breathing system [NASA-CR-134013] p0415 N73-30092
CHARGE SEPARATION
U POLARIZATION (CHARGE SEPARATION)
CHARGED PARTICLES
NT CATIONS
NT FERRIC IONS
NT METAL IONS
NT NUCLEI (NUCLEAR PHYSICS)
NT PHOTOELECTRONS
NT SOLAR WIND
Charged particle energy deposition calculations for radiobiological system [ORO-3798-52] p0070 N73-13090
Vacuum/tissue interface effect on biological energy absorption from charged particle track p0372 N73-29028

CHECKOUT EQUIPMENT
U TEST EQUIPMENT
CHEMICAL ANALYSIS
NT GAS ANALYSIS
NT NEUTRON ACTIVATION ANALYSIS
NT QUANTITATIVE ANALYSIS
NT SPECTROSCOPIC ANALYSIS
NT URINALYSIS
NT VOLUMETRIC ANALYSIS
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis p0396 A73-42163
Stabilization methods in collecting and shipping of human sera for chemical analyses p0143 N73-17053
Chemiotaxionomic survey of carotenoid pigments in several species and groups of Basidiomycetes [NASA-TT-F-14858] p0219 N73-20117
Urinalysis methodology for detection of abusive and therapeutic drugs in man p0228 N73-21117
Chromatographic and polarographic methods for determining metabolic levels of hypnotic drugs in blood plasma and urine of man p0228 N73-21118

CHEMICAL BONDS
A mechanism for polypeptide synthesis on a protein template. p0090 A73-17943
Effects of experimental conditions on parameter estimated when using the Hill model p0153 A73-21872
Study of the possibilities of histone-RNA complex formation in experiments in vitro p0168 A73-24513
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin. p0241 A73-29850

CHEMICAL COMPOSITION
NT CARBON DIOXIDE CONCENTRATION
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man p0234 A73-27996
Stress effects on element balance in human waste for life support recycling system p0184 N73-19107
Chemical composition stability of Chlorella biomass during prolonged cultivation p0184 N73-19108

CHEMICAL ELEMENTS
NT ALUMINUM
NT ARGON
NT BERYLLIUM
NT CALCIUM
NT CALCIUM ISOTOPES
NT CHARCOAL
NT COBALT 60
NT HELIUM
NT HYDROGEN
NT HYDROGEN IONS
NT IRON
NT LEAD (METAL)
NT LITHIUM
NT NITROGEN
NT PLUTONIUM 238
NT POTASSIUM
NT POTASSIUM ISOTOPES
NT RADIOACTIVE ISOTOPES
NT RARE EARTH ELEMENTS
NT RARE GASES
NT RUBIDIUM
NT SODIUM
NT SODIUM 24
NT TITANIUM
NT TRACE ELEMENTS
Decomposition of compounds adsorbed in charcoal of manned spacecraft breathing system [NASA-CR-134013] p0415 N73-30092

CHEMICAL EQUILIBRIUM
NT ACID BASE EQUILIBRIUM
Chemical composition stability of Chlorella biomass during prolonged cultivation p0184 N73-19108

CHEMICAL EXTINGUISHERS
U FIRE EXTINGUISHERS
CHEMICAL FUELS
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars [NASA-TM-X-2714] p0107 N73-15118

CHEMICAL INDICATORS
Analysis of indicator distribution in the determination of cardiac output by thermal dilution. p0125 A73-21216

CHEMICAL KINETICS
U REACTION KINETICS
CHEMICAL PROPERTIES
NT THERMOCHEMICAL PROPERTIES
Chemical characteristics of mushroom pigments and mycological classifications [NASA-TT-F-14865] p0219 N73-20124
Physical and chemical characteristics, and biological activity of exhaust from beryllium-fueled motor [AD-756531] p0259 N73-22042

CHEMICAL REACTIONS
NT DENITROGENATION
NT FERMENTATION
NT GLYCOLYSIS
NT HYDROGENATION
NT HYDROLYSIS
NT OXIDATION
NT OXYGENATION
NT PHOSPHORYLATION
NT PHOTOCHEMICAL REACTIONS
NT PHOTOCHROMISM
NT PHOTOSYNTHESIS
NT PYROLYSIS
NT REDUCTION (CHEMISTRY)
NT TITRATION
Chemical evolution - Recent syntheses of bioorganic molecules. p0202 A73-26477
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels p0383 A73-40372

CHEMICAL SHIFT
U CHEMICAL EQUILIBRIUM
CHEMICAL STERILIZATION
Formaldehyde gas as a sterilant. p0288 A73-33694

Spacecraft polyurethane foam jacket sterilization by gas method, discussing ethylene oxide and methyl bromide sorption and desorption
p0395 A73-42160

CHEMICAL TESTS
NT CHEMICAL ANALYSIS
NT GAS ANALYSIS
NT NEUTRON ACTIVATION ANALYSIS
NT QUANTITATIVE ANALYSIS
NT SPECTROSCOPIC ANALYSIS
NT URINALYSIS
NT VOLUMETRIC ANALYSIS
Methods for determining blood alcohol levels in pilots
p0229 N73-21124
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128

CHEMILUMINESCENCE
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354

CHEMORECEPTORS
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564

CHEMOTHERAPY
Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160
Long-term observations in patients with angina and normal coronary arteriograms.
p0097 A73-18871
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus
p0123 A73-20982
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
Antidiabetic medications and aircrew
p0128 A73-21541
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
Prophylaxis and treatment of the motion sickness syndrome
p0240 A73-29410
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Cobalt compound administration effects on hypoxic stress control, testing polycythemic response and cobalt retention in rats
p0307 A73-34744
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations
p0321 A73-36546
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856
Functional state of the auditory analysor under conditions of prolonged clinostatic hypokinesia
p0425 A73-43789
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689
Salvarsan therapy of luetic patients and behavior of Wassermann reaction
[NASA-TT-F-14618] p0609 N73-11076
Pharmacological measures for prophylactic and restorative treatment of men and animals during space flight
p0212 N73-20060
Hypothermy effects on drug actions in physiological rabbit functions
p0212 N73-20064
Drug therapy effects on flying effectiveness and psychosomatic fitness of flying personnel
p0226 N73-21103
Chemotherapy for air crews in Great Britain
p0226 N73-21105
Effects of human biorhythms on chemotherapy and drug evaluation
p0228 N73-21119
Suitability of insulin dependent and oral drug dependent diabetics as navigation personnel
p0228 N73-21120
Drug effects on vision of flying personnel
p0228 N73-21121
Flight safety factors in prescribing tranquilizing drugs for flying personnel
p0228 N73-21123

CHILDREN
Coronary atherosclerosis development and prevention in children, discussing hyperlipidemia, hypertension, cigarette smoking and high risk identification
p0243 A73-30065
Absorption of fructose in saline mixture used for enteritis therapy of children
[NASA-TT-F-14596] p0609 N73-11078
Bioelectric activity changes in brains of sleeping children caused by aging factor
p0257 N73-22032
Meteorological conditions and infection of upper respiratory tract in children
[NLL-M-22866-(5828.4P)] p0297 N73-25109
Satellite telecommunications systems for childhood education
[NASA-CR-133028] p0300 N73-25131

CHILLING
U COOLING

CHIMES
U AUDITORY SIGNALS

CHIMPANZEES
NT MONKEYS
Physiological study of dynamics and evolution of chimpanzee complex behavior, considering motor reactions, group behavior and nerve mechanisms of voluntary acts
p0426 A73-43928
Scientific and engineering studies for Physiology of Chimpanzees in Orbit Program
[NASA-CR-131374] p0220 N73-20129
Interface requirements for design and development of Physiology of Chimpanzees in Orbit experiment

[NASA-CR-131397] p0220 N73-20130

CHIPS
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on speed p0423 A73-43212

CHLORELLA
Study of the effect of increased oxygen concentration on the metabolism of Chlorella p0279 A73-31508
Survival and mutability of Chlorella under various orientation in the earth's gravitational field. p0314 A73-35997
Effect of dynamic factors of space flights on green alga Chlorella vulgaris. p0314 A73-36098
Chemical composition stability of Chlorella biomass during prolonged cultivation p0184 N73-19108
Effects of atmospheric oxygen concentration on Chlorella photosynthesis p0262 N73-23032
Photosynthesis of chlorella p0378 N73-29326

CHLORIDES
NT CALCIUM CHLORIDES
NT COPPER CHLORIDES
NT DICHLORIDES
NT HYDROGEN CHLORIDES
NT POTASSIUM CHLORIDES
NT SILVER CHLORIDES
NT SODIUM CHLORIDES

CHLORINE COMPOUNDS
NT CALCIUM CHLORIDES
NT CHLORINE FLUORIDES
NT COPPER CHLORIDES
NT DICHLORIDES
NT POTASSIUM CHLORIDES
NT SILVER CHLORIDES
NT SODIUM CHLORIDES
Toxicity of atmospheric dichloromethane levels in simulated space cabin atmosphere on dogs, rats, mice, and monkeys
[NASA-TM-X-69099] p0177 N73-18129
Effect of toxic substances on algae by observing photosynthesis determined by oxygen production of algae
[DRIC-TRANS-2991] p0187 N73-19139

CHLORINE FLUORIDES
The acute inhalation toxicology of chlorine pentafluoride. p0282 A73-32173
Symptomatic and pathological information from acute toxicity exposure of chlorine pentafluoride
[AD-751452] p0138 N73-16078

CHLOROPHYLLS
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae. p0287 A73-33226

CHLOROPLASTS
Photosensitized inhibitor formation in isolated, aging chloroplasts. p0122 A73-20453

CHOLESTEROL
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value. p0059 A73-15521
An experimental basis for carcinogenic effects of ultraviolet radiation. p0203 A73-26485
Prevention of the atherosclerotic diseases - Opportunities for military medicine. p0248 A73-30518
Emotional overstress effects on the indices of the blood coagulation system in monkeys p0249 A73-30846
Serum cholesterol and plasma lipid elevation separation of hypercholesterolemic patients for atherosclerosis therapy p0320 A73-36533
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels p0383 A73-40284
Mechanisms of hyperlipidaemias in different clinical conditions. p0405 A73-42832
Blood groups and plasma cholesterol esterification. p0408 A73-43106
Blood group A sub-groups and serum cholesterol. p0408 A73-43107
Blood pressure and cholesterol level screening for preventing heart diseases in flight crews of commercial airline p0146 N73-17076
Influence of repeated test and dietary counseling on hypercholesterolemia control in NASA employees p0146 N73-17081
Absorption of bile acids and cholesterol by polymers p0191 N73-19976
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826] p0216 N73-20093

CHOLINE
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects p0170 A73-24597
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells. p0243 A73-30061

CHOLINERGIC BLOCKING AGENTS
U ANTICHOLINERGICS

CHOLINERGICS
NT ANTICHOLINERGICS
Mediator systems and respiratory function during an acute lethal loss of blood p0117 A73-19645
Neurochemical aspects of the formation of electrographical and behavioral reactions p0167 A73-24327
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat. p0316 A73-36439
Participation of cholinergic mechanisms in negative human emotions p0362 A73-39799
Transverse acceleration effects on rat gastrointestinal response to drugs p0181 N73-19085

CHOLINESTERASE
Factors influencing reactivation of phosphorylated acetylcholine esterase by oximes
[BMVG-FBWT-72-32] p0187 N73-19137
Inhibiting and activating effect of mono- and bi-quaternary pyridioxide reactivators on bovine erythrocyte cell membrane
[BMVG-FBWT-72-9] p0187 N73-19138
Cholinesterase reactivator as antidote in human organophosphate poisoning p0254 N73-21998

CHONDRITES
NT CARBONACEOUS METEORITES

CHROMATOGRAPHY
Chromatographic determination of gaseous metabolites released by man during reduced food intake p0064 N73-12091
Self-scanning chromatographic-fluorographic drug detector with optical readout system
[NASA-CASE-ARC-10633-1] p0259 N73-22048
Chromatographic determination of aldosterone level in urine
[RAE-LIB-TRANS-1682] p0333 N73-26061
Chromatographic determination of urine corticosteroids
[RAE-LIB-TRANS-1694] p0333 N73-26062

CHROMOSOMES
Y-chromosome localization in the interphase nuclei of cerebral neurons in man p0582 A73-11444
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat. p0587 A73-12187
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays p0280 A73-31517
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite p0314 A73-36117

)mputer technique for automatic analysis of planar characteristics of chromosome patterns in microscopic observations
[JPRS-57418] p0070 N73-13085
Radiation effects on human chromosomal aberrations in peripheral blood lymphocytes
p0263 N73-23041
Machine assisted human chromosome karyotyping and aberration for radiation damage
[ANL-7960-PT-2] p0334 N73-26068

CHRONIC CONDITIONS
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation
p0305 A73-34230
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
Chronic acceleration effects on homeotherm physiological adaptation in terms of body weight, tolerable field intensity, growth and fat deposition inhibition, etc
p0398 A73-42177
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
Chronic disease health trends and mortality rates in employee population of NASA Goddard Space Flight Center
p0147 N73-17086

CHRONOPHOTOGRAPHY
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828

CHRONOTHONS
U PULSE RATE
U TIME LAG

CINEFLUOROGRAPHY
U RADIOGRAPHY

CINEMATOGRAPHY
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness
p0280 A73-31515
Bioelectric monitoring and motion picture surveying for improved physical training of astronauts
p0263 N73-23039

CINERADIOGRAPHY
U RADIOGRAPHY

CIRCADIAN RHYTHMS
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
Effect of hypergravity on the circadian rhythms of white rats.
[ASME PAPER 72-WA/BHF-14] p0061 A73-15877
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
Circadian rhythms - Subcellular and biochemical aspects.
p0089 A73-17824
Biological clocks in animal orientation and in other functions.
p0089 A73-17825
Diurnal rhythm oscillations of fat metabolism indices in healthy young men
p0117 A73-19646
Mitotic activity in dorsal epidermis of Rana pipiens.
p0122 A73-20456
Diurnal psychic working capacity dynamics under conditions of continuous 72-hr wakefulness
p0124 A73-20989
Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
Characteristics of the higher nervous activity of monkeys during a postneurotic period
p0206 A73-27108
Astronauts diurnal life cycle inversion during space flight missions, considering social factors and work-rest cycle effects
p0208 A73-27715
German monograph - Investigation concerning a consideration of the human circadian rhythm by means of a variable working time.
p0240 A73-29283
Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600
Circadian rhythms in human mental performance from waking day, round of clock and simulated shiftwork studies
p0286 A73-33156
Daytime human performance and temperament rhythms as function of individual introversion-extroversion rating
p0286 A73-33157
Sleep behaviour as a biorhythm.
p0286 A73-33158
Investigation of the possibility of human adaptation to a 16-hour day
p0305 A73-34238
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
Patterns of diurnal variation in the intraocular pressure of airline pilots.
p0355 A73-39107
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482

Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
Circadian rhythm change study of transmeridian flight and medication effects on mildly hypertensive subject
[AD-743300] p0595 N73-10090
Influence of time zones on physiological organs and systems and performance of athlete
[NASA-TT-F-14632] p0073 N73-13116
Changes in circadian rhythm of aircraft pilot oral body temperature as result of transmeridian flights
[DLR-FB-73-01] p0178 N73-18140
Circadian phase relationships of physiological functions of isolated monkeys subjected to varying photoperiod phases
p0224 N73-21088
Effects of work-rest schedules, circadian rhythms, continuous work, and sleep loss on sustained performance
p0271 N73-23988
Experimental research in underwater medicine, flight stress, and pilot selection
[DLR-FB-73-15] p0367 N73-27951
Resynchronization of circadian rhythms following transmeridian flight observed in two groups of students
p0368 N73-27958
Effects of two sequential transatlantic flights on circadian rhythm of body function and performance
p0369 N73-27964
Rhythm disturbances in sleep and wakefulness cycles of Soyuz 3 and 9 crews before, during, and after space flight
[NASA-TT-F-15103] p0375 N73-29048
Time shift effects on human 17-hydroxy corticosteroid diurnal excretion noting transmeridian flights
[DLR-FB-73-58] p0412 N73-30070
Preflight and flight stress analysis, its relation to circadian rhythms measured in pilot physiological parameters
[DLR-FB-72-39] p0412 N73-30071
Human circadian rhythms of blood circulation, respiration and catabolism under flight simulation stress
[DLR-FB-72-49] p0413 N73-30073
Circadian rhythms of sleep and cerebral temperature in rats chronically exposed to hot environments
[NASA-TT-F-15082] p0417 N73-30994
Human psychomotor performance circadian rhythm variations after transmeridian flight noting time shift effect
[DLR-FB-73-52] p0421 N73-31022
Psychoneurological problems in adaptation by man to modified diurnal regimes
p0444 N73-33031

CIRCUITS
NT COUNTING CIRCUITS
NT DISCRIMINATORS
NT FEEDBACK CIRCUITS
NT FIRE CONTROL CIRCUITS
NT INTEGRATED CIRCUITS
NT LOGIC CIRCUITS
NT PHASE DETECTORS
NT POWER SUPPLY CIRCUITS
NT RC CIRCUITS
NT THRESHOLD GATES
NT TRANSISTOR CIRCUITS
NT WHEATSTONE BRIDGES
Initial systole and dicrotic notch detecting circuitry for monitoring arterial pressure pulse
[NASA-CASE-LEW-11581-1] p0178 N73-18139

CIRCULATION
NT BLOOD CIRCULATION
NT BRAIN CIRCULATION
NT CARBOXYHEMOGLOBIN
NT CONGESTION
NT CORONARY CIRCULATION
NT INTERCRANIAL CIRCULATION
NT INTRAVASCULAR SYSTEM
NT ISCHEMIA
NT OCULAR CIRCULATION
NT PERIPHERAL CIRCULATION
NT PULMONARY CIRCULATION

CIRCULATORY SYSTEM
NT AORTA
NT ARTERIES
NT BLOOD VESSELS
NT CAPILLARIES (ANATOMY)
NT GLOMERULUS
NT VASCULAR SYSTEM
NT VEINS
Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening
p0056 A73-14660
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
Pathogenesis of some respiratory and circulatory reactions accompanying drop in barometric pressure
p0134 N73-16047

CIVIL AVIATION
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation
p0083 A73-16733
Civil aviation medicine in the coming decade.
p0117 A73-19484
Renal lithiasis among civil operating aircrew
p0127 A73-21536
Proteinuria and civil aviation aircrew
p0128 A73-21538
Civil aviation medicine functional standardization and expansion, emphasizing preventive medicine, health education and operational safety
p0170 A73-24718
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
US civil airmen statistics
[AD-754271] p0223 N73-20153
Drug screening data for civil aviation personnel obtained by urinalyses
p0226 N73-21104

CLASSIFICATIONS
NT INDEXES (DOCUMENTATION)
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
Numerical classification and coding of electrocardiograms.
p0059 A73-15647
Automatic analysis and classification of electroencephalograms
p0309 A73-34966
Classification of radioprotectors for radiation sickness prevention effects
p0212 N73-20065

CLASSIFYING
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965

CLAYS
Hydroponic cultivation of plants on clay filters from human mineralized feces
p0184 N73-19110

CLEAN ROOMS
Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAR-10076-1] p0221 N73-20137
Design of anesthetic flow valve canister system for exhaust gas absorption and laminar ventilation system for operating rooms
p0231 N73-21141

CLEANERS
NT AIR FILTERS
Sanitizing agents for cleansing and decontaminating spacecraft environment
[NASA-CR-128591] p0603 N73-10149

CLEANING
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990
Cleaning processes and postcleaning inspection procedures for meeting oxygen system cleaning

requirements
[NASA-SP-3072] p0111 N73-15155
Dermatological testing of personal hygiene cleansing agents and laundry detergents for possible use in Skylab Program
[NASA-CR-128880] p0222 N73-20143
CLIMATOLOGY
NT BIOCLIMATOLOGY
NT MICROCLIMATOLOGY
Italian thermal conditions affecting acceleration tolerance and psychomotor performance of flying personnel
p0266 N73-23068
Man induced changes in earth climate by environment pollution and heat production
[PB-213676/2] p0267 N73-23074
Agroclimatology study of highlands of eastern Africa
[WMO-339] p0446 N73-33045
CLINICAL MEDICINE
Three channel FM telemetry system for long term EEG monitoring, discussing routine clinical operation results
p0054 A73-14298
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648
Clinical diagnosis of angina pectoris, implicating obstructive disease of coronary arteries and effects of paroxysmal events on heart rate and blood pressure
p0085 A73-17277
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Modeling, instrumentation and data evaluation in clinical electroretinography, discussing Fourier analysis of sinusoidal light stimulation response in normal and abnormal humans
p0310 A73-35359
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
Mid- and late changes in the QRS complex.
p0320 A73-36528
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529
Clinical manifestations of acute myocardial infarction.
p0321 A73-36543
Evaluation, diagnosis and treatment of common structural complications of acute myocardial infarction.
p0321 A73-36548
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826
Mechanisms of hyperlipidaemias in different clinical conditions.
p0405 A73-42832
Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129
Use of Ringers lactate solution in pre- and postoperative fluid therapy
[NASA-TT-F-14600] p0592 N73-10071
Tracking tests as quantitative measurements of neuromuscular functions in clinical applications
p0599 N73-10118
Microelectrophoresis of human erthyrocytes as diagnostic tool in gynecology and obstetrics
[NASA-TT-F-14587] p0069 N73-13077
Argon laser radiation damage to retina of diabetic and nondiabetic patients
[AD-747058] p0071 N73-13099
Use of space technology to solve medical problems and improve medical equipment
p0075 N73-13848
Blood lipid diagnostic and therapeutic measures to prevent heart disease in humans
p0145 N73-17073
Risk scoring system for identifying subjects with high risk to coronary heart disease
p0146 N73-17080
Clinical analysis of relationship between VPB and mortality rate in patient with acute myocardial infractions
p0146 N73-17083
Automated medical record system for identifying and managing medical problems for Navy
p0147 N73-17087
Clinical practice and problems associated with urine analysis
p0147 N73-17089
Survey of industrial hygiene and safety in Air Forces operations
[AD-751897] p0151 N73-17126
Luciferase ATP assay procedure for determining bacterial infections in urinary tract
[NASA-CR-130797] p0173 N73-18096
Influence of Pervitin in decreasing gas bubbles in blood during decompression
[DLR-FB-72-66] p0175 N73-18117
Studies of biomedical applications of NASA technology
[NASA-CR-130809] p0178 N73-18135
Clinical procedures for selecting pilot personnel based on predisposition to motion sickness
p0225 N73-21094
Tracking tasks for clinical evaluation of human movement disorders
[NASA-CR-132275] p0340 N73-27069
Use of therapeutic exercise for treatment of functional vascular disorders and occlusive lesions of arteries and veins
[NASA-TT-F-15043] p0374 N73-29045
Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347
Hygienic importance and toxicity of manganese oxides, and clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067
Water load tests for determining hydration status and adrenal and kidney functions during post flight period
[NASA-TT-F-15091] p0417 N73-30998
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] p0437 N73-32000
CLOSED ECOLOGICAL SYSTEMS
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
Passive and active mode classification of air contamination sources in closed manned spaces, considering mechanical, electrical, chemical, physical and human factors
p0193 A73-25037
Recorded observations of crew member activities during Tektite 2 underwater habitability study
[NASA-CR-130034] p0140 N73-16094

Habitability factors during long-term space and undersea missions in confined habitats
[NASA-CR-130537] p0151 N73-17123
Stress effects on element balance in human waste for life support recycling system
p0184 N73-19107
Cosmonaut adaptation to dehydrated food products and effects on human waste cycle
p0184 N73-19113
Ability of organism to maintain normal physiological activities in bioregenerative system
[NASA-CR-130807] p0252 N73-21979

CLOSED LOOP SYSTEMS
U FEEDBACK CONTROL

CLOTH
U FABRICS

CLOTHING
NT BOOTS (FOOTWEAR)
NT FLIGHT CLOTHING
NT GLOVES
NT GOGGLES
NT HELMETS
NT PRESSURE SUITS
NT PROTECTIVE CLOTHING
NT SPACE SUITS
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Thermal comfort - New directions and standards.
p0325 A73-36785
Thermal resistance of clothing noting radiative body heat transfer, air layers, and clothing thickness
[DRIC-TRANS-2920] p0067 N73-12117
Numerical analysis of thermal resistance of air layers in air permeable clothing
[NLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089
Examination of physical processes governing heat transfer through air-penetrable clothing in wind
[DRIC-TRANS-2921] p0113 N73-15166

CLOUD COVER
Radiation regime of forest vegetation under plant cover and open areas under various weather conditions
p0378 N73-29329

COAGULATION
NT BLOOD COAGULATION

COATINGS
NT PAINTS
NT PLASTIC COATINGS
NT PROTECTIVE COATINGS
NT THERMAL CONTROL COATINGS

COBALT
NT COBALT 60

COBALT COMPOUNDS
Cobalt compound administration effects on hypoxic stress control, testing polycythemic response and cobalt retention in rats
p0307 A73-34744

COBALT ISOTOPES
NT COBALT 60

COBALT 60
Effect of chronic irradiation of dogs by Co60 gamma rays on level of autoantibodies
p0216 N73-20100

COCHLEA
Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem
p0118 A73-19650
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
Neuroanatomy of the auditory system.
p0244 A73-30280
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Current aspects of the cochlear function in members of flight crews
p0330 A73-36940
Influence of N-type sound wave pressure rise time on guinea pig cochlear and acoustically evoked potentials
[ISL-31/72] p0365 N73-27940

COCKPITS
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload
[DGLR PAPER 72-097] p0584 A73-11666
Pilot workload and performance measures in terms of physiological activity in flight deck environment for reduced aircraft accidents due to human error
p0347 A73-37732
Methods of evaluating electronic cockpit display devices, emphasizing control, psychology, physiology, and subjective rating
[DGLR-PAPER-72-97] p0074 N73-13118
Multivariate limits for describing cockpit related anthropometric features of aviation personnel
[AD-752032] p0151 N73-17124
Influence of cockpit noise on hearing in flight crew personnel
[FAA-AM-72-32] p0185 N73-19125
Computerized design of fighter aircraft cockpit electronic control system considering man machine interaction
p0270 N73-23905
High q approach for cockpit design
[AD-757216] p0295 N73-24138

CODING
NT SIGNAL ENCODING
Numerical classification and coding of electrocardiograms.
p0059 A73-15647
Neural channel mechanism for real light and equivalent background coding, using test flashes under bleaching and field adaptation
p0121 A73-20258
Book - Sensory coding in the mammalian nervous system.
p0199 A73-25799
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965
Spatial information coding in the human visual system - Psychophysical data.
p0309 A73-35240
Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337
Space shuttle orbiter subsystems, formats and format trees, and coding of sample format - Vol. 3
[NASA-CR-128578] p0603 N73-10147
Color vision requirements for air crew personnel of future, including coding evaluation
[AMRL-TR-71-116] p0180 N73-19076

COEFFICIENTS
NT CORRELATION COEFFICIENTS
NT HEAT TRANSFER COEFFICIENTS

COENZYMES
NT CYTOCHROMES
NT THIAMINE

COGNITION
A model of the human in a cognitive prediction task.
p0399 A73-42223
Cognitive functioning test to measure human performance in underwater diving stress
[AD-748036] p0072 N73-13108
Combined noise and vibration effects on human mental and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
Human psychomotor and cognitive performance in humid environment
[AD-756835] p0296 N73-24142

COHERENT SOUND
U SOUND WAVES

COLD ACCLIMATIZATION
Russian papers on human adaptability covering altitude and temperature acclimatization, work capacity and anthropogenetic and medicogenetic factors
p0584 A73-11921
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold

p0126 A73-21323
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
Effect of adaptation to cold on the energy characteristics of muscular activity
p0235 A73-28295
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671
Metabolic and myoelectric reactions under chemical thermoregulation in rats after accelerated cold adaptation
p0430 A73-44721
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
Human factors investigations and acclimatization research conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29348

COLD TOLERANCE
Unacclimatized male Caucasians lower critical temperature determination for subsequent investigation of ethnic variability in acute cold exposure responses
p0577 A73-10166
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701
Energy supply in acute cold-exposed dogs.
p0324 A73-36655
Thermographic evaluation of relative heat loss areas of man during cold water immersion.
p0325 A73-36781
Tolerance to immersion in cold water
p0331 A73-36943
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787
Low temperature tolerance and adaptation of biological systems to space environment
[JPRS-59129] p0265 N73-23055

COLD WATER
Tolerance to immersion in cold water
p0331 A73-36943

COLLAGENS
Hydroxyproline determination in collagen-like plasma and urine
[NASA-TT-F-15093] p0417 N73-30997

COLLISION AVOIDANCE
Differential velocity effects on converging target intersection time estimation accuracy, considering plane conditions and air traffic controller experience
p0285 A73-32900
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior.
p0387 A73-41158
Analysis of aircraft pilot capability to visually detect other aircraft in air to air situation as collision avoidance feasibility
[FAA-RD-73-40] p0231 N73-21145
Performance tests to determine capability of aircraft pilots to avoid midair collisions based on visual perception of target and information from pilot warning indicator
p0231 N73-21146
Photographic recording of aircraft in near midair collision conditions to determine feasibility of collision avoidance based on visual perception of pilot
[CDC-JL-5] p0231 N73-21147
Analysis of flight tests to determine range of visual detection of aircraft as basis for visual perception to avoid midair collisions
p0231 N73-21148

COLLISION WARNING DEVICES
U COLLISION AVOIDANCE
U WARNING SYSTEMS

COLLISIONS
NT METEORITE COLLISIONS

COLLOIDS
NT AEROSOLS
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792

COLOR
Color naming latencies with brief exposures of individual Stroop and control stimuli
[AD-745106] p0596 N73-10094

COLOR BLINDNESS
U COLOR VISION

COLOR PERCEPTION
U COLOR VISION

COLOR PHOTOGRAPHY
Color and color infrared aerial photographic detection of Dutch elm disease
p0297 N73-25110

COLOR VISION
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis.
p0585 A73-12077
Color effects in visual discrimination, measuring response times in letter matching task
p0588 A73-12525
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Color vision in terms of spectral sensitivity, color appearance and discrimination, chromatic stimuli production, pigments spectral response, etc
p0079 A73-16481
Congenital and acquired color vision defects, discussing color blindness incidence, defect nomenclature and eye tests
p0079 A73-16482
Color naming and hue discrimination in congenital tritanopia and tritanomaly.
p0120 A73-20251
Stimulus effect on spatial summation of color receptive pathways and discrimination thresholds as function of color, gradient, retinal illumination and field size
p0120 A73-20254
Photochemical receptor mechanism of chromatic vision and scotopic contrast hue sensation due to cone and rod activity interaction
p0121 A73-20261
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
Single cell analysis of saturation discrimination in the macaque.
p0129 A73-21568
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896
Retinal mechanisms of colour vision.
p0161 A73-23316
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196
The influence of wavelength on visual adaptation to spatially periodic stimuli.

p0200 A73-26199
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Evoked potentials to changes in the chromatic contrast and luminance contrast of checkerboard stimulus patterns.
p0236 A73-28355
Cone spectral sensitivity studied with an ERG method.
p0236 A73-28358
The macular and paramacular local electroretinograms of the human retina and their clinical application.
p0237 A73-28364
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia
p0275 A73-30999
Threshold and suprathreshold perceptual color differences.
p0275 A73-31019
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
Book - The psychology of visual perception.
p0310 A73-35474
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Spatial characteristics of chromatic induction - The segregation of lateral effects from stray light artefacts.
p0346 A73-37419
Dichromatic convergence points obtained by subtractive colour matching.
p0346 A73-37420
Reaction times for focal and nonfocal /peripheral/ processing of simultaneously presented color and form stimuli
p0388 A73-41182
Colored aftereffects after prelonged inspection of convex lines of one color and concave lines of another color
p0389 A73-41303
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166
Influence of illumination color, viewing distance, and turbidity on underwater vision
[AD-743756] p0595 N73-10092
Literature review on psychophysiological factors affecting visual perception of colored signal light
[AD-746297] p0610 N73-11083
Color vision requirements for flying personnel of various armed forces - conferences
[AGARD-CP-99] p0179 N73-19065
Three color receptors of Young-Helmholtz and opponent color types of information processing
p0179 N73-19066
Color vision requirements for German Air Force personnel
p0179 N73-19067
Color aptitude of dyschromatopsia French navigators and pilots
p0179 N73-19068
Color vision testing and selection procedures for flying personnel since World War 1
p0179 N73-19069
Color vision requirements of Canadian Armed Forces, including their standard tests
p0179 N73-19070
Standardization of tests and classification of color perception abnormalities in military personnel
p0179 N73-19071
Color vision requirements of Great Britain's Armed Forces
p0179 N73-19072
Comparison of accident rates among color defective and normal personnel
p0179 N73-19073
Color vision tests as predictive indicators of flying task performance
p0180 N73-19074
Helicopter flying in poor light and featureless terrain and color vision abnormality
p0180 N73-19075
Color vision requirements for air crew personnel of future, including coding evaluation
[AMRL-TR-71-116] p0180 N73-19076
Proceedings of symposium on color vision, color perception, visual acuity, and psychophysiology
[AD-754328] p0221 N73-20136
Effects of reduced atmospheric pressure, elimination of nitrogen, hypoxia, and exposure to restricted visual environment on range of accommodation and color vision
[NASA-CR-128896] p0258 N73-22037
Literature review on human macular pigment absorption and density spectrum of cone receptor
[IZF-1972-17] p0264 N73-23046
Color vision standards for flying military aircrews
[FPRC/1319] p0366 N73-27942
Relationship between intermediate medium, and transformation and contrast phenomena
[NASA-TT-F-15035] p0376 N73-29055

COLORATION
U COLOR

COLORIMETRY
Dichromatic convergence points obtained by subtractive colour matching.
p0346 A73-37420

COMBAT
Biological effects of sleep deprivation, and effects of prolonged work on performance under combat conditions
p0271 N73-23989
Combat job performance and training for air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027

COMBINATORIAL ANALYSIS
Criteria for selected response surface methodology design variants in human performance research
[AD-748236] p0102 N73-14099

COMBINED STRESS
Combined stress effects in human communication and motion sickness biodynamics
p0188 N73-19144
Combined heat, noise, and vibration effects on aircrew performance
[AMRL-TR-71-113] p0188 N73-19146
Combined noise and vibration effects on human mental and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
Measures to determine psychophysiological reactions of military flight crews to flying stress
p0188 N73-19148
Temperature and noise irradiation effects on human energetic metabolism during vigilance task
p0189 N73-19155

COMBUSTIBILITY
U FLAMMABILITY

COMBUSTION
NT FUEL COMBUSTION
Combustibility and toxicity of metals and alloys
[AD-764287] p0418 N73-31003

COMBUSTION CONTROL
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532

COMBUSTION EFFICIENCY
Thermal combustion requirements for burner devices of human vegetative waste products
p0184 N73-19111

COMBUSTION PRODUCTS
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429
Changes in oxygen consumption in rats after inoculation with polymer combustion products
p0182 N73-19096

COMFORT
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
COMMAND AND CONTROL
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110
COMMAND MODULES
Microbiological studies of Apollo 17 command module preflight and postflight samples
[NASA-CR-132022] p0265 N73-23056
COMMAND-CONTROL
U COMMAND AND CONTROL
COMMERCIAL AIRCRAFT
NT BOEING 720 AIRCRAFT
Commercial aircraft passenger cabins interior design, considering seating arrangements, cabin architecture and fittings, materials and color schemes and maintainability
p0163 A73-23687
Effect on pilot performance and comfort of active vibration isolation system for commercial transport pilot seat
[NASA-CR-2146] p0066 N73-12109
COMMERCIAL AVIATION
U CIVIL AVIATION
U COMMERCIAL AIRCRAFT
COMMUNICATING
NT ELECTROCUTANEOUS COMMUNICATION
NT INFORMATION DISSEMINATION
NT VERBAL COMMUNICATION
German monograph on human information transmission by multidimensional tactile stimuli investigation using method of learned signals identification
p0122 A73-20393
COMMUNICATION
NT INFORMATION DISSEMINATION
NT VERBAL COMMUNICATION
Use of skin analyzer as communication channel in controlling activity
p0069 N73-13074
COMMUNICATION EQUIPMENT
Effectiveness of training device for air traffic communication and carrier landing control
[AD-751556] p0141 N73-16101
Position reporting and communications systems of aviation and marine rescue operations
[AD-761756] p0369 N73-27967
COMMUNICATION SATELLITES
Satellite telecommunications systems for childhood education
[NASA-CR-133028] p0300 N73-25131
COMMUNICATION SYSTEMS
U TELECOMMUNICATION
COMMUNICATION THEORY
NT WORDS (LANGUAGE)
COMMUNITIES
NT MOUNTAIN INHABITANTS
COMPARTMENTS
NT AIRCRAFT COMPARTMENTS
NT COMMAND MODULES
NT PRESSURE CHAMBERS
NT PRESSURIZED CABINS
NT SPACECRAFT CABINS
NT TEST CHAMBERS
COMPATIBILITY
Psychological stresses and crew compatibility during interplanetary spacecraft flight
[JPRS-57878] p0106 N73-15113
COMPENSATION
Compensating for distortion in viewing pictures obliquely.
p0387 A73-41178
COMPENSATORY TRACKING
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
Operator remnant power spectral density measurement during compensatory tracking task by serial segments method, noting Fourier coefficient processing
p0578 A73-10324
Central tracking task performance simultaneously with response to peripheral stimulus under high heat stress environments
p0096 A73-18473
Nonadjectival rating scales in human response experiments.
p0310 A73-35400
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Decrements in tracking and visual performance during vibration.
p0431 A73-44777
Random Gaussian distribution for input noise approximation in human response tracker modeling
p0598 N73-10110
Tracking tests as quantitative measurements of neuromuscular functions in clinical applications
p0599 N73-10118
Visual display format effects on pilot describing functions in manual tracking performance
p0599 N73-10123
Magnetic data tapes containing measurements of pilot scanning behavior, control response and vehicle response during simulated instrument landing approaches
p0600 N73-10124
Human physiological and psychological responses in long time exposure to simulated space station atmosphere as observed by critical tracking task
p0601 N73-10133
Hypoxia stress effects on human operator performance in unstable tracking task using manual control
p0602 N73-10138
Effect of concurrent audio tasks on human operator compensatory tracking performance using manual control system
p0602 N73-10139
Attention sharing effects on human operator performing simultaneously dynamic compensatory tracking control tasks
p0602 N73-10140
Motion cue effects on pilot manual control tracking task
p0602 N73-10141
Dynamic model for pilot manual control ability using aural compensatory tracking
p0602 N73-10142
Sonic boom effects on individuals compensatory tracking performance for unstable system
[UTIAS-TN-179] p0612 N73-11098
Computerized fast Fourier transform technique for measuring human performance in compensatory tracking task
[AD-748659] p0100 N73-14078
Pupil enlargement in relation to operator stress during adaptive critical tracking task
[AD-749075] p0100 N73-14081
Compensatory oculogravic response of eye movement direction during slow head rotation
p0111 N73-15148
Study of differences between left and right hand performance in compensatory tracking task
[RAE-TR-72117] p0141 N73-16098
Linear rating scale for selecting tracking task parameters by subjective operator
[AD-752036] p0151 N73-17125
Adaptive tracking task for evaluating drug after-effects on human flight performance
p0227 N73-21109
Pilot performance in dual time-sharing tracking task
[AD-755363] p0269 N73-23088
Human visual/motor response to tracking task during long term confinement in simulated space station
[NASA-CR-2240] p0295 N73-24134
Tracking tasks for clinical evaluation of human movement disorders
[NASA-CR-132275] p0340 N73-27069
Tracking performance during whole-body vibration with side-mounted and center mounted control sticks
[AD-761798] p0370 N73-27971
COMPETITION
Sports medicine - parameters necessary for maintaining competitive form
p0227 N73-21114
COMPLEX SYSTEMS
Interactive aspects of man/learning system control teams.
p0081 A73-16708

COMPLEX VARIABLES
NT ANALYTIC FUNCTIONS
COMPLEXITY
NT TASK COMPLEXITY
COMPLIANCE (ELASTICITY)
U MODULUS OF ELASTICITY
COMPONENT RELIABILITY
Probability estimate models for reliable function of redundant systems with adaptable and inadaptable neuron-like restoration organs p0431 A73-44904
COMPOSITION (PROPERTY)
NT ATMOSPHERIC COMPOSITION
NT BODY COMPOSITION (BIOLOGY)
NT CARBON DIOXIDE CONCENTRATION
NT CHEMICAL COMPOSITION
NT CONCENTRATION (COMPOSITION)
NT LUNAR COMPOSITION
NT METEORITIC COMPOSITION
NT MOISTURE CONTENT
COMPRESSED AIR
Bibliography on role of vestibular apparatus in compressed air work underwater [AD-750686] p0109 N73-15133
COMPRESSED GAS
NT HIGH PRESSURE OXYGEN
COMPRESSION LOADS
NT IMPACT LOADS
COMPRESSIVE STRENGTH
Strength limits correlation to modulus of elasticity for compact bone material from compression tests, noting anisotropy tensor analysis p0045 A73-13744
COMPUTER DESIGN
A simple cardiac contractility computer. p0403 A73-42677
COMPUTER GRAPHICS
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography. p0089 A73-17801
Spline function interpolation in interactive hemodynamic simulation. p0098 A73-18889
On-line computer analysis and breath-by-breath graphical display of exercise function tests. p0127 A73-21511
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays. p0234 A73-28095
Detection of informational constraints related to multi-variate visual displays. p0240 A73-29185
Sorcerer Apprentice head mounted display with wand for interaction with computer generated synthetic objects, describing creation of illusory three dimensional environment p0344 A73-37323
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog p0407 A73-42973
Real time hybrid computer audio synthesis system [AD-761730] p0369 N73-27968
COMPUTER METHODS
U COMPUTER PROGRAMS
COMPUTER PROGRAMMING
NT ON-LINE PROGRAMMING
Computation of solutions to the inverse problem of electrocardiography. p0582 A73-11465
Computer controlled infusion pump for time varying input of calcium into physiological systems [NASA-CASE-ARC-10447-1] p0101 N73-14092
Computerized multivariate scheduling of physical examinations for NASA personnel in clinical intervention program p0145 N73-17068
COMPUTER PROGRAMS
Complex processing of discrete biological information p0580 A73-10662
Computer programs for operator performance time prediction and workspace design p0082 A73-16721
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram. p0306 A73-34533
A diagnostic program - Problems of predicting myocardial infarction on a digital computer p0354 A73-38998
An equation for the oxygen hemoglobin dissociation curve. p0434 A73-45070
Computer program for measuring specific radioisotopes contained in human body [AD-745578] p0593 N73-10078
Hybrid computer identification program for visual display of adaptive control state to human operator p0598 N73-10109
Interactive information system with application in medical area [NASA-TM-X-66076] p0604 N73-10156
Statistical analysis of air combat situation evaluations conducted by US Navy pilots to detect differences caused by experience [AD-747519] p0068 N73-12119
Computer program for evaluating biological parameters [ISS-72/4] p0186 N73-19128
Statistical analysis of NASA multivariate spectrum analysis program performance after modifications [NASA-CR-134011] p0417 N73-30995
COMPUTER SIMULATION
U COMPUTERIZED SIMULATION
COMPUTER STORAGE DEVICES
NT MAGNETIC TAPES
COMPUTER TECHNIQUES
A system for continuous measurement of gas exchange and respiratory functions. p0577 A73-10172
Computerized correlation analysis of single and multiple neuron pulse activity, considering temporal, sequential and entropy characteristics p0579 A73-10653
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer p0579 A73-10656
Digital filters applicable to electroencephalographic pattern recognition. p0582 A73-11464
Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening p0056 A73-14660
New developments in EEG signal processing. p0058 A73-15279
Use of an on-line computer in a study of cardiac arrhythmia. p0059 A73-15644
Computer-aided ECG analysis and research in a clinical setting. p0059 A73-15648
Interactive aspects of man/learning system control teams. p0081 A73-16708
Computer-assisted instruction in pilot training and certification. p0082 A73-16724
Computer-controlled differential review-time payoff as a training aid. p0083 A73-16725
The employment of a spoken language computer applied to an air traffic control task. p0083 A73-16728
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms. p0089 A73-17860
A robot conditioned reflex system modeled after the cerebellum. p0092 A73-18065
Compact digital coding of electrocardiographic data. p0097 A73-18815
A method for chronocyclographical motion analysis with the aid of an on-line computer p0119 A73-20036
German monograph - Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram. p0122 A73-20391
USAF WAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system

p0155 A73-22539
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer
p0237 A73-28502
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
Computer controlled automatic TV-microscope system for tracking and measuring nerve cell processes in designated axons and dendrites
p0359 A73-39763
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man
p0401 A73-42656
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
Computer acquisition of multiunit nerve-spike signals.
p0403 A73-42671
Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578
Computer technique for automatic analysis of planar characteristics of chromosome patterns in microscopic observations
[JPRS-57418] p0070 N73-13085
Computer-based pupil/tracking monitoring system for Mesa Public Schools, Mesa Arizona
p0191 N73-19985
Structural design of computer controlled manipulator for remote handling
p0335 N73-26079

COMPUTERIZED CONTROL
U NUMERICAL CONTROL

COMPUTERIZED DESIGN
Computer programs for operator performance time prediction and workspace design
p0082 A73-16721
Computerized design of fighter aircraft cockpit electronic control system considering man machine interaction
p0270 N73-23905

COMPUTERIZED SIMULATION
NT ANALOG SIMULATION
NT DIGITAL SIMULATION
The employment of a spoken language computer applied to an air traffic control task.
p0083 A73-16728
Spline function interpolation in interactive hemodynamic simulation.
p0098 A73-18889
Digital computer studies of respiratory control.
p0123 A73-20577
Computer simulation of gas exchange in human lungs.
p0278 A73-31348
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844

Investigation of the nature of biological rhythm sensors by means of automatic networks
p0393 A73-41865
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
Visual image generation as textured flight information resembling retinal images for airborne flight simulation
p0600 N73-10128
Whole body counter efficiency calculations using NaI(Tl) detector for measuring point sources
[KFKI-72-30] p0067 N73-12114
Pilot performance during simulated standard instrument procedure turn with and without predictor display
[NASA-TM-X-62201] p0150 N73-17118
Computerized simulation of passenger emergency evacuation efficiency using Boeing 720 aircraft models
[FAA-AM-72-30] p0150 N73-17119
Computerized simulation of three dimensional robots using generalized cylinder descriptions
[AD-755139] p0223 N73-20152
Computerized simulation of anatomically correct geometrical model of human body
[NASA-CR-134043] p0440 N73-32022

COMPUTERS
NT ANALOG COMPUTERS
NT DIGITAL COMPUTERS

CONCENTRATION (COMPOSITION)
NT CARBON DIOXIDE CONCENTRATION
NT MOISTURE CONTENT
X ray fluorescence analysis for determining lead content of paint on pencils in Goddard supply system
p0148 N73-17097

CONCENTRATORS
Cost estimates for carbon dioxide concentrators in spacecraft life support systems
[NASA-CR-124302] p0340 N73-27073

CONCORDE AIRCRAFT
Radiation problems of supersonic flight - The operators' viewpoint.
p0080 A73-16624
Solar flare frequency and associated physical phenomena diversity, discussing earth atmosphere protective effects and impact on Concorde flights
p0115 A73-19210
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Geomagnetic latitude variation of cosmic radiation rates measured onboard Concorde SST prototypes, investigating solar flares
p0204 A73-26588

CONDITIONED RESPONSES
U CONDITIONING (LEARNING)

CONDITIONING
High temperature tolerance of rats under normal conditions, after thermal conditioning and combined with drugs
p0216 N73-20099

CONDITIONING (LEARNING)
Conditioned reflex learning and phenamine-stimulated functional activation of cerebral synaptic, protein synthesizing and energy generating apparatus
p0085 A73-17177
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis
p0092 A73-18163
Statistical distribution methods for analyzing formation of reflexes conditioned to time intervals between periodic unconditioned stimuli
p0093 A73-18166
Learning ability of rats to regulate hypoxic ambient atmosphere by instrumental response, discussing motivation and reinforcement factors
p0095 A73-18439
German monograph on human information transmission by multidimensional tactile stimuli

investigation using method of learned signals identification
p0122 A73-20393
Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response
p0166 A73-24326
Self-imposed timeouts under increasing response requirements.
p0170 A73-24625
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
Comparative analysis of the electrical activity of the cortex and of cerebral subcortical formations in the process of the alteration of conditioned reactions
p0205 A73-27104
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
Characteristics of the higher nervous activity of monkeys during a postneurotic period
p0206 A73-27108
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
Alpha wave peak amplitude dependence on blocking pattern after stimulation during habituation-pseudoconditioning, conditioning and extinction
p0242 A73-29992
Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection
p0248 A73-30568
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test
p0285 A73-33091
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type'
p0362 A73-39797
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801
Successive differentiation of visual stimuli in monkeys under various conditions of presentation
p0363 A73-39805
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations
p0429 A73-44673
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166
Overview of literature concerning retention of learned skills with emphasis on space flight skill retention
[NASA-CR-128611] p0603 N73-10152
Behavioral learning response of cat to electric stimulation of auditory nervous system
[NASA-CR-132047] p0293 N73-24124
Use of motivational relations to find acceptor of action with conditioned stimuli
p0448 N73-33064
Relation of conditioned reactions to evaluation of results of forthcoming reinforcement
p0449 N73-33065
Orientative-investigative reaction as factor changing configuration of evoked potentials during repeated light flashes
p0449 N73-33070

CONDITIONS
NT CHRONIC CONDITIONS
NT FLIGHT CONDITIONS
NT NONEQUILIBRIUM CONDITIONS

CONDUCTIVE HEAT TRANSFER
Human thermoregulatory system examination under thermodynamic equilibrium based on conductive and convective metastable heat transfer from skin to environment
[ASME PAPER 73-AUT-J] p0240 A73-29414
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp.
p0361 A73-39791
Sweat rate and heat conductance in thermoregulatory system during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074

CONDUCTORS
NT AIRCRAFT ANTENNAS
NT ELECTROLYTES
NT ION EXCHANGE MEMBRANE ELECTROLYTES
NT MICROWAVE ANTENNAS
NT RADIO ANTENNAS

CONFERENCES
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
Biotelemetry; Proceedings of the International Symposium, Nijmegen, Netherlands, May 5-8, 1971.
p0052 A73-14276
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.
p0056 A73-14649
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
Orientation: Sensory basis; Proceedings of the Conference, New York, N.Y., February 8-10, 1971.
p0091 A73-18030
Radiation protection at the work site: Scientific, technical and organizational aspects; Annual Scientific Conference, 6th, Karlsruhe, West Germany, May 17-19, 1972, Reports
p0195 A73-25310
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351
Heart rate variability and the measurement of mental load; Proceedings of the Symposium, London, England, October 1971.
p0250 A73-30876
Annual Scientific Meeting, Las Vegas, Nev., May 7-10, 1973, Preprints.
p0287 A73-33421
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
Advances in electrocardiography; Proceedings of the Symposium, Emory University, Atlanta, Ga., May 10-13, 1971.
p0318 A73-36516

International Congress of Aeronautical and Space Medicine, 20th, Nice, France, September 18-21, 1972, Reports
p0327 A73-36901
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972.
p0395 A73-42158
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856
Conference on manual control systems for human operator modeling and display systems in man machine environments
[NASA-SP-281] p0597 N73-10104
Conference on biological effects of magnetic fields
[NRC-TT-1545] p0099 N73-14070
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
Conference on occupational and environmental medical services provided to NASA employees
[NASA-TM-X-69074] p0146 N73-17078
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093] p0173 N73-18104
Review of papers presented at Conference on Space Biology and Aerospace Medicine
[JPRS-58345] p0176 N73-18125
Color vision requirements for flying personnel of various armed forces - conferences
[AGARD-CP-99] p0179 N73-19065
Conference on operational flight stress effects on human biodynamics and performance
[AGARD-CP-101] p0188 N73-19143
Conference on human visual search and perception
[AD-754327] p0221 N73-20133
Proceedings of symposium on color vision, color perception, visual acuity, and psychophysiology
[AD-754328] p0221 N73-20136
Predictability of motion sickness in pilot selection - conferences
[AGARD-CP-109] p0225 N73-21092
Conference on detection, evaluation, and identification of drugs and alcohol in flying personnel and effects on flight fitness
[AGARD-CP-108] p0226 N73-21102
USSR conference on exobiology and aerospace medicine
p0264 N73-23045
Aerospace medicine research, including human tolerance to various stress factors - conferences
[AGARD-CP-110] p0265 N73-23057
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Proceedings of conference on pattern information processing
[PB-214617/3] p0294 N73-24129
General problems with psychology in scientific and technical creativity
[TT-70-57147-1] p0413 N73-30074
Articles on methodology and historical importance of scientific research in creativity
[TT-70-57147-2] p0413 N73-30075
Presentations on psychological models, cybernetics, methodology, and applications to teaching
[TT-70-57147-3] p0413 N73-30076

CONFINEMENT
Biological effects of lasting hypodynamia on young albino rats in 62 day confinement, considering weight, growth and sexual behavior
p0124 A73-20983

CONGENITAL ANOMALIES
Fingerprint patterns incidence relation in congenital vitium cordis patients, using Henry dactyloscopic classification
p0581 A73-11080
Congenital and acquired color vision defects, discussing color blindness incidence, defect nomenclature and eye tests
p0079 A73-16482
Color naming and hue discrimination in congenital tritanopia and tritanomaly.
p0120 A73-20251
Echocardiography status, potentialities and requirements in congenital heart disease diagnosis, considering feasibility in left ventricular performance evaluation
p0243 A73-30053
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984

CONGENITAL CONDITIONS
U CONGENITAL ANOMALIES

CONGESTION
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522

CONJUGATION
Conjugation of proteinoid microspheres - A model of primordial recombination.
p0091 A73-17952

CONNECTIVE TISSUE
NT COLLAGENS
NT MARROW
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729

CONSCIOUSNESS
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555
Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695

CONSECUTIVE EVENTS
Estimation of the passing of four consecutive hours.
p0086 A73-17524

CONSEQUENT LAKES
U LAKES

CONSTANTS
NT PERCEPTUAL TIME CONSTANT
NT TIME CONSTANT

CONSTRAINTS
NT METEOROLOGICAL PARAMETERS
Multidimensional judgments in design of ideal organisms with integral number of resource units allocated among characteristics such as memory, vision, resourcefulness, etc
p0044 A73-13559
Development and characteristics of inflatable airbag restraint system for use in general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127
Requirements for mobility aids and restraint devices for use by personnel of space shuttle - Vol. 4
[NASA-CR-133994] p0419 N73-31009

CONSUMPTION
NT OXYGEN CONSUMPTION
NT WATER CONSUMPTION

CONTACT LENSES
Management of cataract in commercial flight personnel.
p0329 A73-36927

CONTAMINANTS
NT TRACE CONTAMINANTS
Quantitative evaluation of superficial organic contaminants, soluble in halogenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis
p0096 A73-18547
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964
Nuclear submarine atmospheric constituent monitoring, covering mass spectrometers, IR carbon monoxide sensors, system development, requirements testing and spacecraft applications
[ASME PAPER 73-ENAS-9] p0349 A73-37970

CONTAMINATION
NT SPACECRAFT CONTAMINATION
Passive and active mode classification of air contamination sources in closed manned spaces, considering mechanical, electrical, chemical, physical and human factors p0193 A73-25037
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques. p0391 A73-41637
Microbial contamination studies for spacecraft assemblies [NASA-CR-131086] p0185 N73-19123
Terrestrial quarantine considerations for unmanned sample return missions [NASA-CR-132071] p0293 N73-24118
Metabolism and propagation of microbial contamination in planetary atmospheres [NASA-CR-133638] p0375 N73-29049
CONTINUOUS NOISE
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions. p0578 A73-10436
CONTINUOUS RADIATION
Biophysical hazards of microwave radiation. p0285 A73-32723
Continuous low dose gamma irradiation effects on cell population kinetics of mice lymphoid tissue [NASA-CR-135723] p0437 N73-31999
CONTINUOUS WAVES
U CONTINUOUS RADIATION
CONTINUUM MECHANICS
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma. p0577 A73-10168
Continual mechanochemical model of muscular tissue p0381 A73-40182
CONTOURS
Color photographic system using grid projector and telecentric lenses for recording contours of human face for aircrew oxygen mask fitting [RAE-TR-71184] p0141 N73-16099
CONTRALATERAL FUNCTIONS
Loudness enhancement following contralateral stimulation. p0581 A73-10827
CONTRAST
NT IMAGE CONTRAST
CONTROL BOARDS
Effect of the information panel structure on operator activity p0394 A73-41889
CONTROL DEVICES
U CONTROL EQUIPMENT
CONTROL EQUIPMENT
NT CONTROL STICKS
NT PRESSURE REGULATORS
NT TELEOPERATORS
Control equipment for sterilization facility used to thermally inactivate microbes on interplanetary space vehicle components [NASA-CR-131103] p0185 N73-19122
Design and performance of demand regulated liquid breathing systems for mammalian respiration p0252 N73-21976
CONTROL PANELS
U CONTROL BOARDS
CONTROL STICKS
Tracking performance during whole-body vibration with side-mounted and center mounted control sticks [AD-761798] p0370 N73-27971
CONTROL THEORY
Ergatic organism defined as multipurpose nonautonomous control system with homeostasis with respect to functional operations conservation p0119 A73-20048
Ergatic modeling as dynamic goal-oriented physical process based on heuristic autonomous information-structured organization system with regulated model-human operator interaction p0241 A73-29418
Book - Principles of biological regulation: An introduction to feedback systems. p0283 A73-32576
Management of the treatment of illnesses as a problem of modern control theory p0357 A73-39348
Control theory model for pilot decision making based on estimated state of linear plant p0597 N73-10107
Reliability probability analysis on ergatic process in spacecraft control during approach and docking with orbital station p0064 N73-12087
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems [NASA-TT-F-14336] p0335 N73-26073
Psychological concept for developing cybernetic control devices [JPRS-60103] p0440 N73-32019
CONTROL VALVES
Performance of anti-G valve subjected to varying acceleration forces [AD-760814] p0377 N73-29062
CONTROLLABILITY
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation p0083 A73-16733
CONTROLLED ATMOSPHERES
NT CABIN ATMOSPHERES
NT HELIUM-OXYGEN ATMOSPHERES
NT SPACECRAFT CABIN ATMOSPHERES
Thermoregulatory reactions of animals in a helium-oxygen medium p0088 A73-17695
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere p0123 A73-20979
Nuclear submarine atmospheric constituent monitoring, covering mass spectrometers, IR carbon monoxide sensors, system development, requirements testing and spacecraft applications [ASME PAPER 73-ENAS-9] p0349 A73-37970
Cyclically changing temperature effects on monitoring behavior and physiological responses of man [AD-748451] p0104 N73-14110
Thermoregulation reactions of rats in hypoxic atmosphere with nitrogen and helium dilution p0134 N73-16046
Effect of atmosphere with increased oxygen and carbon dioxide content on human orthostatic tolerance following 10 days of bedrest p0135 N73-16055
Human nitrogen and water/salt metabolisms in controlled regenerative atmosphere p0181 N73-19089
Hyperbaric chamber used to determine influence of increased ambient pressure and gas density on cardiac rate in man [AD-755129] p0261 N73-22058
Temperature and humidity control in air quality modeling for optimal life support system of spacecraft cabin p0294 N73-24131
CONTROLLERS
NT SERVOMECHANISMS
NT SERVOMOTORS
CONVAIR MILITARY AIRCRAFT
U MILITARY AIRCRAFT
CONVECTIVE HEAT TRANSFER
Human thermoregulatory system examination under thermodynamic equilibrium based on conductive and convective metastable heat transfer from skin to environment [ASME PAPER 73-AUT-J] p0240 A73-29414
CONVULSIONS
Influence of different motor regimes on the convulsive reactivity of the central nervous system. p0085 A73-17178
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain p0245 A73-30381
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex p0384 A73-40750
COOLING
NT AIR COOLING
NT LIQUID COOLING
Evaluation of sex difference in thermal sensitivity in men and women [NASA-CR-114564] p0150 N73-17113

COOLING SYSTEMS
Simulation of a steady-state integrated human thermal system. p0282 A73-32225
Design, development, and fabrication of liquid cooled space suit using ice pack heat sink - Vol. 1
[NASA-CR-114624-VOL-1] p0419 N73-31006
COORDINATES
NT POLAR COORDINATES
COPILOTS
U AIRCRAFT PILOTS
COPPER CHLORIDES
Effect of copper ions on the functional state of the neuromuscular apparatus p0154 A73-22369
COPPER COMPOUNDS
NT COPPER CHLORIDES
CORIOLIS EFFECT
Vestibular reactions to Coriolis accelerations under hypoxia conditions p0088 A73-17691
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn. p0117 A73-19485
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals p0209 A73-27718
Prophylaxis and treatment of the motion sickness syndrome p0240 A73-29410
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer p0280 A73-31516
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems p0280 A73-31518
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia p0303 A73-34121
Visual-vestibular interaction and motion perception. p0318 A73-36460
Dynamic model of rotating spacecraft force effects on human vestibular system p0599 N73-10119
Effect of space flight on origin, physiological function, and amelioration of coriolis illusion in semicircular canal
[AMRU-R-70-6] p0607 N73-11063
Hypoxia effects on human vestibular tolerance during exposure to coriolis accelerations p0065 N73-12092
Determination of angular acceleration equivalent to effect of coriolis acceleration on receptors of semicircular canals p0218 N73-20112
Biaxial simulator imposing standardized coriolis stimuli for selection, test, and rehabilitation of motion sick pilots p0225 N73-21098
Laboratory investigation of coriolis acceleration effects on vestibular apparatus of cosmonauts
[NASA-TT-F-15129] p0417 N73-30993
CORN
Multispectral remote sensing techniques for identification of corn blight disease
[NASA-TM-X-69055] p0136 N73-16064
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-132145] p0293 N73-24119
CORNEA
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice p0279 A73-31510
CORONARY CIRCULATION
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion. p0579 A73-10549
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt. p0583 A73-11505
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization. p0587 A73-12443
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics. p0590 A73-12821
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease. p0043 A73-13543
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart. p0053 A73-14291
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times. p0057 A73-14767
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents. p0059 A73-15523
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris. p0085 A73-17279
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects p0088 A73-17770
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography. p0089 A73-17801
Pattern of blood flow within the heart - A stable system. p0125 A73-21214
Inability of the submaximal treadmill stress test to predict the location of coronary disease. p0130 A73-21802
Distribution of systemic blood flow during cardiopulmonary bypass. p0158 A73-22930
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter. p0159 A73-23173
Coronary flow and left ventricular function during environmental stress. p0162 A73-23380
Immediate hemodynamic effects of cardiac angiography in man. p0165 A73-23841
Regional myocardial dynamics from single-plane coronary cineangiograms. p0171 A73-24771
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units. p0209 A73-27891
Assessment of left heart function by noninvasive exercise test in normal subjects. p0277 A73-31345
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86. p0288 A73-33990
Coronary atherosclerosis and ischemic myocardial damage. p0320 A73-36538
Factors influencing coronary blood flow in the presence of coronary obstructive disease. p0321 A73-36539
The prognosis of myocardial infarction. p0321 A73-36549
Nonlinear analysis of aortic flow in living dogs. p0384 A73-40640
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men. p0399 A73-42342
The complications of coronary arteriography. p0399 A73-42343
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971. p0404 A73-42826

The early diagnosis of coronary heart disease - Critical review.
p0404 A73-42827
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors
p0404 A73-42828
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease.
p0405 A73-42829
Indications and value of coronary arteriography.
p0405 A73-42830
The value of different angiographic procedures in coronary heart disease.
p0405 A73-42831
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease
p0405 A73-42837
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856
Velocity distribution in aortic flow.
p0408 A73-43104
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Response of coronary blood flow to pH-induced changes in hemoglobin-02 affinity.
p0433 A73-45061

CORPUSCULAR RADIATION
NT PRIMARY COSMIC RAYS
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867

CORRELATION
NT ANGULAR CORRELATION
NT CORRELATION COEFFICIENTS
NT SIGNAL ANALYSIS
NT STATISTICAL CORRELATION
Correlative function formalism for neuron networks with limited communication channels and active-refractive-storing signal action
p0389 A73-41277
Correlation of assessed maximum oxygen intake with predicted performance in running events
[AD-746867] p0071 N73-13093

CORRELATION COEFFICIENTS
Radioisotopic T-3 and T-4 thyroid function tests in the pig-tailed monkey /Macaca nemestrina/.
p0588 A73-12548
Serial correlation of physiological time series and its significance for a stress analysis
p0352 A73-38159

CORRELATION FUNCTIONS
U CORRELATION

CORRELATORS
NT IMAGE CORRELATORS

CORSAIR AIRCRAFT
U A-7 AIRCRAFT

CORTEXES
Neuronal changes in cortical motor region cells during pharmacological induced sleep
p0257 N73-22028

CORTI ORGAN
Electron-microscopy investigation of Corti's organ after noise trauma
p0078 A73-16333
Neuroanatomy of the auditory system.
p0244 A73-30280
Corti organ lesion effects on signal perception in patients with noise induced hearing loss, correlating speech discrimination with age and sound level
p0352 A73-38182

CORTICOSTEROIDS
NT ALDOSTERONE
NT CORTISONE
NT HYDROXYCORTICOSTEROID
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430
Chromatographic determination of urine corticosteroids
[RAE-LIB-TRANS-1694] p0333 N73-26062

CORTISONE
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158

COSMIC RADIATION
U COSMIC RAYS

COSMIC RAYS
NT PRIMARY COSMIC RAYS
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Geomagnetic latitude variation of cosmic radiation rates measured onboard Concorde SST prototypes, investigating solar flares
p0204 A73-26588
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Frequency of heavy ions in space and their biologically important characteristics.
p0398 A73-42178
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
Microdosimetric pattern of galactic heavy primaries dissipation in tissues during space flight
[NASA-CR-131467] p0230 N73-21132
Apollo 16 experiment using biostack to determine effects of heavy nuclei on biological organisms
p0232 N73-21761
Nuclear track dosimetry for monitoring cosmic ray exposure of Apollo 16 astronauts
p0292 N73-24114
Relationship between peaks of cosmic radiation and ischemic heart disease
[NASA-TT-F-14992] p0334 N73-26065

COSMONAUTS
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Analysis of cosmonaut emotional stress as determined by physiological and behavioral responses
[NASA-TT-F-14654] p0067 N73-12113
Indices of emotional stress in cosmonauts during Voskhod 2 and Soyuz flights
[JPRS-58039] p0148 N73-17104
Role of cosmonaut in spacecraft control
p0178 N73-18137
Morphological composition of peripheral blood of crew members of Soyuz-9 and Salyut-1

p0217 N73-20104
Role of cosmonaut in man-spacecraft system, and psychological aspects in training cosmonauts as operators
[NASA-TT-F-727] p0229 N73-21129
Phytological and physiological problems caused by rest-work cycles of cosmonauts during space flight
[NASA-TT-F-14990] p0336 N73-26093
Scheduling of work-rest cycle for cosmonauts during space flights
p0416 N73-30984

COST ANALYSIS
Environmental factors and cost problems of selecting optimum sanitary landfill site for solid waste disposal
[NASA-CR-128744] p0189 N73-19157
Cost analysis of oxygen supply equipment and recovery systems for orbital space stations
[NASA-CR-124175] p0230 N73-21137
Cost analysis of oxygen recovery subsystems for life support systems
[NASA-CR-124304] p0340 N73-27075
Cost analysis of mass spectrometers and gas chromatographs for life support atmosphere monitoring
[NASA-CR-124306] p0341 N73-27076

COST EFFECTIVENESS
Operational effectiveness of jet flight training simulator
[AD-750248] p0113 N73-15170
Cost effectiveness of water reclamation subsystem in advanced aerospace life support systems
[NASA-CR-124098] p0177 N73-18134
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 1
[AD-756638] p0296 N73-24143
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 2
[AD-756639] p0296 N73-24144
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 3
[AD-756640] p0296 N73-24145
Human factors in design of avionics subsystems considering training costs and performance of Air Force personnel
[AD-759583] p0337 N73-26096
Examination of man machine systems efficiency in relation to cost criteria
p0414 N73-30087

COST ESTIMATES
Model for estimating impact of manned EVA costs on future payloads - Vol. 3
[NASA-CR-128928] p0268 N73-23083
Cost estimating method for life support systems of manned earth orbital programs
[NASA-CR-124305] p0340 N73-27072
Cost estimates for carbon dioxide concentrators in spacecraft life support systems
[NASA-CR-124302] p0340 N73-27073
Methodology for predicting relevant contributions of cost elements in development of water recovery systems
[NASA-CR-124303] p0340 N73-27074
Cost data for modified hydrogen depolarized carbon dioxide concentrator in life support system
[NASA-CR-124462] p0447 N73-33052

COULOMETRY
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750

COUNTERS
NT PROPORTIONAL COUNTERS
NT RADIATION COUNTERS
NT SCINTILLATION COUNTERS

COUNTING CIRCUITS
Automatic pulse count recorder, discussing circuit, performance and applications to laboratory and clinic
p0580 A73-10663

COUPLING
NT CROSS COUPLING
Magnetic couplings and magnetomechanical transmissions for airtight manipulator design
p0336 N73-26086

CRABS
Light evoked changes in potential difference between inside and outside of cells in Limulus ommatidia, describing multistage model of generator potential
p0160 A73-23309
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311

CRANIUM
NT INTRACRANIAL CAVITY
Orbit and superior orbital fissure acoustic window for cranium posterior structures imaging by echoencephalographic techniques
p0402 A73-42667
Vestibular function loss in man after unilateral section of eighth cranial nerve
[NASA-CR-129672] p0070 N73-13084

CRASH INJURIES
Helmets effectiveness evaluation from acceleration and impact tests, discussing test criteria and civilian and military standards
p0286 A73-33132
Aircraft crash injury reduction through seat and restraint design, discussing dummy size considerations, seat belts, aircraft acceleration and injury types
[SAE PAPER 730290] p0306 A73-34655
Severe intraabdominal injuries without abdominal protective rigidity after an air crash - Seat belt injury
p0356 A73-39209
Statistical analysis of impact injuries to seated human responding to square wave energy absorption of vertical deceleration pulse representing helicopter crash
[AD-745919] p0612 N73-11102

CRASH LANDING
NT DITCHING (LANDING)
Crew survival after emergency landing or ditching in unpopulated areas
[NASA-TT-F-15047] p0376 N73-29053

CRASHES
NT CRASH LANDING
NT DITCHING (LANDING)

CREATINE
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284

CREATININE
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
Elimination of creatinine in urine during prolonged hypokinesia
p0444 N73-33029

CREATION
U CREATIVITY

CREATIVITY
Reflex act structural components interaction in terms of reflection, creativity and organism-environment relations, noting subjective and objective perception and attitude formation
p0061 A73-15798
General problems with psychology in scientific and technical creativity
[TT-70-57147-1] p0413 N73-30074

CREWS
NT FLIGHT CREWS
NT SPACECREWS

Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Problems involved in achieving harmony in life and work of small groups applied to prolonged space flights
p0444 N73-33032
CRICKETS
NT TRIBOLIA
CRITERIA
Criteria for selected response surface methodology design variants in human performance research
[AD-748236] p0102 N73-14099
Psychometric criteria for pilot performance in F-4 aircraft fleet
[AD-755184] p0269 N73-23087
CRITICAL FLICKER FUSION
Photopic luminous efficiency measured by critical flicker frequency method, noting dependence on intermittence frequency of light stimulus or overall radiance level
[AD-754344] p0585 A73-12076
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
Dynamic properties of vision. III - Twin flashes, single flashes and flickerfusion.
p0120 A73-20253
Cyclofusional stimulation effects on retinal image disparity in terms of central component and Panum fusional areas
p0121 A73-20265
Analysis of transient visual sensations above the flicker fusion frequency.
p0129 A73-21566
Binocular rivalry and binocular fusion of after-images.
p0200 A73-26200
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
CRITICAL TEMPERATURE
Unacclimatized male Caucasians lower critical temperature determination for subsequent investigation of ethnic variability in acute cold exposure responses
p0577 A73-10166
CROP GROWTH
Russian book on mathematical models of biological systems covering biogeocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems
p0154 A73-22347
Mathematical model for photosynthetic gas exchanges in growing wheat and radish biopaks of life support systems
p0063 N73-12081
Comparative studies of photosynthetic activity of pure and mixed crops during vegetative period
p0378 N73-29321
Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat
p0378 N73-29335
Light and carbon dioxide effects on algal life support systems in space flight
[NASA-CR-135796] p0445 N73-33039
CROP VIGOR
Multispectral remote sensing techniques for identification of corn blight disease
[NASA-TM-X-69055] p0136 N73-16064
CROSS COUPLING
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks
p0117 A73-19548
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
CRYOGENIC FLUIDS
NT LIQUID OXYGEN
CRYOGENIC STORAGE
Erythrocyte preservation in blood transfusion practice by cryogenic freezing with polyvinylpyrrolidone
[NASA-TT-F-14590] p0069 N73-13076
Production methods for preventing deterioration of freeze-dried foods
[NASA-CR-128915] p0269 N73-23085
CRYOGENICS
Gas environment effect on catalase cryolysis
p0185 N73-19121
Cryobiological and space biological studies
[JPRS-59129] p0293 N73-24120
Cryogenic heat exchanger for removal of waste heat from spacecraft environmental control life support system
[NASA-CR-124301] p0340 N73-27071
CRYOSORPTION
U SORPTION
CRYSTAL LATTICES
X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps
p0308 A73-34893
CUES
Scalar perceptions with binocular cues of distance.
p0235 A73-28176
Scanning movements in space perception in terms of convergence role during cue conflict and cue isolation experiments
p0318 A73-36462
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task.
p0353 A73-38378
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180
Analysis of reaction time to different visual cuing methods in large displays during secondary task performance
[AD-747688] p0068 N73-12120
Visual cue reinforcement for skill retention in pilot simulated space vehicle approach and landing performance
[NASA-CR-128912] p0269 N73-23086
CULTURE TECHNIQUES
Resistance of soil microorganisms to starvation.
p0589 A73-12627
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828
Russian book on mathematical models of biological systems covering biogeocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems
p0154 A73-22347
Automatic surface inoculation of agar trays.
p0155 A73-22550
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes
p0202 A73-26482
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503

On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165
Automatic inoculating device for agar trays using cotton swab or loop
[NASA-CASE-LAR-11074-1] p0141 N73-16096
Time periods for nutrient solution exchange in optimal biomass yield on porous aggregate
p0183 N73-19106
Chemical composition stability of Chlorella biomass during prolonged cultivation
p0184 N73-19108
Biological mineralization products of human waste for autotroph cultivation
p0184 N73-19109
Hydroponic cultivation of plants on clay filters from human mineralized feces
p0184 N73-19110
Development of procedures of identification of microorganisms on orbiting spacecraft
[NASA-CR-128747] p0186 N73-19132
Methods for improving bacterial transport media
[NASA-CR-128958] p0297 N73-25113

CURING
Nonsporicidal methods for solvent degradation of cured RTV 41 silicon potting compound and chemical curing effects on decontamination properties
[NASA-CR-130720] p0149 N73-17111

CURTISS-WRIGHT MILITARY AIRCRAFT
U MILITARY AIRCRAFT

CURVATURE
Colored aftereffects after prelonged inspection of convex lines of one color and concave lines of another color
p0389 A73-41303

CURVED SURFACES
U CONTOURS

CUTANEOUS PERCEPTION
U TOUCH

CYANO COMPOUNDS
NT ISOCYANATES

CYANOPHYTA
U BLUE GREEN ALGAE

CYBERNETICS
Information processing in the visual system.
p0122 A73-20374
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Soviet bibliography on biocybernetics material received from Jan. to May 1972
[AD-750129] p0113 N73-15167
Cybernetic application of computers in personnel training
[AD-751145] p0178 N73-18143
Cybernetic integration of experiments into CVT system
[NASA-CR-124150] p0230 N73-21136
Presentations on psychological models, cybernetics, methodology, and applications to teaching
[TT-70-57147-3] p0413 N73-30076
Psychological concept for developing cybernetic control devices
[JPRS-60103] p0440 N73-32019
Principles of construction for class of models of intelligent behavior
p0448 N73-33059
Experimental evaluation of model of motor behavior
p0448 N73-33060

CYCLES
NT ACTIVITY CYCLES (BIOLOGY)
NT WORK-REST CYCLE

CYCLONES
NT HURRICANES

CYSTEAMINE
Effectiveness of polymer complex of cysteamine and sulfopropyl ester of dextran as an antiradiation drug on irradiated mice
[DRIC-TRANS-2963] p0108 N73-15125
Effects of antiradiation drug dosage on mice and rat tolerance to transverse acceleration overloads
p0211 N73-20055
Hypoxia and reduced acceleration tolerance of rats after injection of cysteamine radioprotector
p0211 N73-20058
Antiradiation effectiveness of cysteamine in mice under various conditions of gamma radiation
p0212 N73-20067
Elimination of toxic cysteamine in organisms and method for prolonging its radioprotective effect
p0213 N73-20069
Gamma radiation effects on toxic cysteamine elimination in irradiated and nonirradiated mice
p0213 N73-20070
Influence of cysteamine hydrochlorine and vitamin B and C prophylaxis on radiation sickness in humans
p0214 N73-20078
Effect of cysteamine combined with adrenalin and phenamine on reparative processes following irradiation and overload
p0214 N73-20081
Exposure to gamma rays from Co-60 and transverse loads and effectiveness of cysteamine and AET protection
p0215 N73-20086

CYTOCHROMES
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans.
p0045 A73-13598
Informational biopolymer structure in early living forms.
p0090 A73-17946
Isocyanide spin label for studying conformational transitions in cytochrome c, emphasizing heme group
[NASA-TT-F-14623] p0065 N73-12099
Toxic effects of chronic exposure to dichloromethane in liver microsomal cytochromes
[NASA-TM-X-69101] p0176 N73-18128
Molecular organization of active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042

CYTOGENESIS
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
Space flight factors effects on Drosophila development in terms of dominant, autosomal and sex-linked recessive lethals frequency, noting gametogenesis stage sensitivity
p0397 A73-42173

CYTOLOGY
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354
Biological, chemical and cytological methods of microorganism detection integrated into single instrument
p0056 A73-14320
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286
Energy comparisons for lethal doses of gamma radiation and visible light with energy of basal cell metabolism
[AD-746750] p0072 N73-13102
Cytological changes in pine tissues treated with lunar materials collected on Apollo 12 quarantine mission
[NASA-CR-128914] p0265 N73-23054

CYTOPLASM
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296

D

DASHO (DATA ANALYSIS)
U DATA PROCESSING
U DATA REDUCTION
U DATA TRANSMISSION

DAMAGE
NT FIRE DAMAGE

NT IMPACT DAMAGE
NT RADIATION DAMAGE
DAMPING IN PITCH
U PITCH (INCLINATION)
DAMPING IN ROLL
U ROLL
DAMPING IN YAW
U YAW
DAMPNESS
U MOISTURE CONTENT
DARK ADAPTATION
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli
p0120 A73-20257
Photochemical receptor mechanism of chromatic vision and scotopic contrast hue sensation due to cone and rod activity interaction
p0121 A73-20261
Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms
p0162 A73-23317
Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay
p0162 A73-23319
Electroretinogram recovery cycle during light adaptation and after dark adaptation
p0168 A73-24518
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647
Effects of prolonged dark adaptation on autokinetic movement.
p0202 A73-26322
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
Scotopic electroretinography and visual evoked responses under adaptive illumination, comparing blind spot stray light with parafoveal stimulation
p0237 A73-28361
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark.
p0245 A73-30390
Eigenvectors of the sensitivity variations across the human central fovea.
p0407 A73-42957
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
Influence of illumination on electro-oculographic measurements of human eye potential
[AMRU-R-71-1] p0607 N73-11064
DARKNESS
Involuntary eye movements in the presence and absence of points
p0322 A73-36568
DATA ACQUISITION
Coding data of 2565 individual human altitude chamber tests
[NASA-CR-114550] p0136 N73-16066
US civil airmen statistics
[AD-754271] p0223 N73-20153
DATA ADAPTIVE EVALUATOR/MONITOR
U DATA PROCESSING
U DATA REDUCTION
U DATA TRANSMISSION
DATA ANALYSIS
U DATA PROCESSING
U DATA REDUCTION
DATA BASES
Magnetic data tapes containing measurements of pilot scanning behavior, control response and vehicle response during simulated instrument landing approaches
p0600 N73-10124
Automated medical record system for identifying and managing medical problems for Navy
p0147 N73-17087
DATA CONTROL SYSTEMS
U DATA SYSTEMS
DATA CONVERTERS
NT ANALOG TO DIGITAL CONVERTERS
DATA CORRELATION
NT SIGNAL ANALYSIS
DATA HANDLING SYSTEMS
U DATA SYSTEMS
DATA MANAGEMENT
Data management system for prediction of Naval student pilot performances
[AD-744984] p0613 N73-11104
DATA PROCESSING
NT CENTRAL ELECTRONIC MANAGEMENT SYSTEM
NT DATA REDUCTION
NT DATA SMOOTHING
NT OPTICAL DATA PROCESSING
NT SIGNAL ANALYSIS
NT SIGNAL PROCESSING
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
Complex processing of discrete biological information
p0580 A73-10662
Method for quantitative estimation of the functional state of the motor apparatus
p0047 A73-13822
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896
Personnel radiation protection technology and criteria review, discussing dosimeter specifications and automatic data processing
p0195 A73-25314
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079
Forced guidance and distribution of practice in sequential information processing.
p0201 A73-26319
Spatial information coding in the human visual system - Psychophysical data.
p0309 A73-35240
Factors affecting processing mode in visual search.
p0311 A73-35493
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911
Sleep stage classification analysis on heart rate data recordings
[AD-740946] p0605 N73-10167
Electronic detectors and computer software for analyzing human electroencephalographs in isolated environment
[AD-751272] p0142 N73-16105
Three color receptors of Young-Helmholtz and opponent color types of information processing
p0179 N73-19066
DATA PROCESSING EQUIPMENT
NT ANALOG COMPUTERS
NT DATA PROCESSING TERMINALS
NT DIGITAL COMPUTERS
DATA PROCESSING TERMINALS
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
DATA READOUT SYSTEMS
U DATA SYSTEMS
U DISPLAY DEVICES
DATA RECORDING
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932
DATA REDUCTION
NT DATA SMOOTHING

Transinformation and real time identification applied to the study of pilot workload
p0085 A73-17195

The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information.
p0207 A73-27646

Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction.
p0286 A73-33115

X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps
p0308 A73-34893

Modeling, instrumentation and data evaluation in clinical electroretinography, discussing Fourier analysis of sinusoidal light stimulation response in normal and abnormal humans
p0310 A73-35359

Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578

DATA SAMPLING
Compact digital coding of electrocardiographic data.
p0097 A73-18815

DATA SMOOTHING
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal
p0245 A73-30387

DATA SYSTEMS
Data management system for prediction of Naval student pilot performances.
[AD-744984] p0613 N73-11104

DATA TRANSMISSION
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280

Miniature biotelemeter giving 10 channels of wideband biomedical data.
p0058 A73-15388

The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408

Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825

Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424

Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337

DATING
U TIME MEASUREMENT

DEACTIVATION
Gas environment effect on catalase cryolysis
p0185 N73-19121

DEAFNESS
U AUDITORY DEFECTS

DECAY
NT BIOLUMINESCENCE
NT CHEMILUMINESCENCE
NT ELECTROLUMINESCENCE
NT FLUORESCENCE
NT LIGHT EMISSION
NT LUMINESCENCE
NT SPECTRAL EMISSION
NT X RAY FLUORESCENCE

DECELERATION
Decelerator sled simulation for testing air bag restraint system effects in passenger motor vehicle crash
[PB-212706] p0224 N73-20155

DECIDUOUS TREES
Color and color infrared aerial photographic detection of Dutch elm disease
p0297 N73-25110

Light effects on organic matter balance of oak underwood growing in forest understory
p0378 N73-29330

Influence of light conditions and understory tree death on organic matter loss balance in oak underwood
p0378 N73-29331

Measurements of radiation characteristics in multistoreyed overmature oak grove
p0378 N73-29332

Spectrophotometric measurements of spectral composition of conifer and decidous forests
p0379 N73-29337

DECISION ELEMENTS
U LOGICAL ELEMENTS

DECISION MAKING
Flight personnel training meetings, covering decision making, cockpit personnel selection and instructor role analysis
p0041 A73-13073

Interactive aspects of man/learning system control teams.
p0081 A73-16708

The prediction of team monitoring performance under conditions of varied team size and decision rules.
p0081 A73-16710

Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587

Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123

Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514

A model of the human in a cognitive prediction task.
p0399 A73-42223

Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778

Control theory model for pilot decision making based on estimated state of linear plant
p0597 N73-10107

Suboptimal sampling and control behavior of human operator in output prediction task for automatic process
p0598 N73-10114

Statistical analysis of air combat situation evaluations conducted by US Navy pilots to detect differences caused by experience
[AD-747519] p0068 N73-12119

Decision making behavior of sonar operator in target detection and reporting
[AD-750761] p0114 N73-15174

Choice reaction tasks for discriminating individual skill potentials in information handling situations
[AD-752073] p0150 N73-17115

Linear rating scale for selecting tracking task parameters by subjective operator
[AD-752036] p0151 N73-17125

Motivational patterns underlying devolunteering by submarine graduate school personnel
[AD-749324] p0260 N73-22054

Probabilities models of organizational behavior and human subjective performance
[IZF-1973-3] p0268 N73-23076

Pilot performance in dual time-sharing tracking task
[AD-755363] p0269 N73-23088

Monte Carlo simulation for man machine task sequencing considering pilot performance degradation
p0270 N73-23899

DECISION THEORY
NT STATISTICAL DECISION THEORY
Conjoint-measurement framework for the study of probabilistic information processing.
p0588 A73-12545

DECOMPOSITION
NT GLYCOLYSIS
Decomposition of compounds adsorbed in charcoal of manned spacecraft breathing system
[NASA-CR-134013] p0415 N73-30092

DECOMPRESSION
U PRESSURE REDUCTION

DECOMPRESSION SICKNESS
Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563

Gas phase separation following decompression in asymptomatic rats - Visual and ultrasound monitoring.
p0050 A73-14162

Pathogenesis of some respiration and circulation reactions to barometric pressure gradients

p0123 A73-20980
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet.
p0195 A73-25327
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen.
p0238 A73-28511
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Effect of certain flight factors on crew efficiency
p0383 A73-40350
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
Lesions of nervous system and vascular embolisms in decompression sickness
[AD-743330] p0593 N73-10076
Clinical study of 56 cases with neurological symptoms in decompression sickness
[AD-744298] p0594 N73-10086
Correlation of respiratory distress and ultrasonic transmission with severe decompression sickness in hamsters
[AD-743475] p0595 N73-10091
Annotated bibliography with preliminary analysis on dysbaric osteonecrosis
[AD-747258] p0071 N73-13100
Effects of gas bubbles in decompression pathology of humans
[AD-748229] p0108 N73-15126
Pathogenesis of some respiratory and circulatory reactions accompanying drop in barometric pressure
p0134 N73-16047
Analysis of mechanisms of human tolerance to lower body decompression
p0135 N73-16054
Influence of Pervitin in decreasing gas bubbles in blood during decompression
[DLR-FB-72-66] p0175 N73-18117
Review of decompression and altitude sickness noting effects at safe depths/altitudes
[DRIC-TRANS-3035] p0259 N73-22041
Oxygen breathing in decompression sickness and remedial recompression of human beings
[DRIC-TRANS-3095] p0334 N73-26069
Pure oxygen and oxygen/nitrogen atmospheres for preventing decompression disease in astronauts
p0372 N73-29029
Influence of personal characteristics on likelihood of decompression sickness
[NASA-CR-135495] p0418 N73-31002
Hematology of miniature pigs after rapid decompression
[DLR-FB-73-63] p0446 N73-33047

DECONTAMINATION
NT SPACECRAFT STERILIZATION
Design principles for contamination abatement in scientific satellites.
p0584 A73-11991
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Microbial burden estimation for planning planetary quarantine of advanced spacecraft
[NASA-CR-131845] p0258 N73-22039

DEFECTS
NT AUDITORY DEFECTS

DEFLATING
U INFLATABLE STRUCTURES
U PRESSURE REDUCTION

DEFORMATION
NT PLASTIC DEFORMATION

DEGASSING
NT DEOXYGENATION

DEGENERATION
Structural characteristics of connections between medial efferent systems and spinal cord neurons
p0156 A73-22577

DEGRADATION
NT THERMAL DEGRADATION
Biodegradation from evolution viewpoint as physiological function and fundamental cellular process regulating biological equilibrium, explained by intracellular digestion and phagocytic cells association
p0385 A73-41024
Nonsporicidal methods for solvent degradation of cured RTV 41 silicon potting compound and chemical curing effects on decontamination properties
[NASA-CR-130720] p0149 N73-17111

DEHYDRATED FOOD
Microbiological testing of Skylab foods.
p0205 A73-27075
Cosmonaut adaptation to dehydrated food products and effects on human waste cycle
p0184 N73-19113

DEHYDRATION
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063

DELTA MODULATION
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408

DEMINERALIZING
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981

DEMODULATION
Human visual evoked response signal decomposition by complex demodulation in terms of after-discharge time, envelope and frequency parameters
p0203 A73-26497

DENITROGENATION
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Pure oxygen and oxygen/nitrogen atmospheres for preventing decompression disease in astronauts
p0372 N73-29029

DENSITOMETERS
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] p0415 N73-30090

DENSITY (MASS/VOLUME)
NT GAS DENSITY

DENSITY (NUMBER/VOLUME)
NT ION DENSITY (CONCENTRATION)
NT PARTICLE DENSITY (CONCENTRATION)
NT PROTON DENSITY (CONCENTRATION)

DENSITY DISTRIBUTION
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate
p0237 A73-28476

DENTISTRY
Unified approach to biomechanics of dental implantology
p0191 N73-19977

DEOXYGENATION
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Effect of hypoxia and hyperoxia on rate of blood deoxygenation, and influence of antioxidants in mice
p0216 N73-20096

DEOXYRIBONUCLEIC ACID
Russian book - Information macromolecules during radiation injury to cells.
p0060 A73-15707

DNA catabolism in rat tissues in response to transverse accelerations p0087 A73-17679

Antiradial properties of DNA and of its denaturation products p0098 A73-18875

Silk fibroin, collagen, glycoproteins, keratin and protamines formation in single evolutionary event by de novo synthesis of DNA p0116 A73-19219

RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system p0249 A73-30842

Protein and nucleic acid contents in animal tissues under hypokinesia p0279 A73-31503

Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell p0427 A73-44095

Desoxyribonucleases in sweat gland secretion of man p0429 A73-44674

Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver p0063 N73-12080

DEPENDENCE
NT SPATIAL DEPENDENCIES
NT TIME DEPENDENCE

DEPOLARIZATION
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading. p0171 A73-24900

Cardiac action potential rising phase and generation mechanism, discussing pacemaker potential and slow depolarization initiating upstroke in spontaneously active cardiac cells p0197 A73-25592

Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents p0401 A73-42652

Gaussian curve simulation of multiple-dipole model of ventricular depolarization [TH-71-E-25] p0067 N73-12116

Hydrogen depolarized cell for removing CO2 in spacecraft life support systems [NASA-CR-131868] p0259 N73-22047

DEPOLARIZERS
U DEPOLARIZATION

DEPRESSANTS
NT CENTRAL NERVOUS SYSTEM DEPRESSANTS

DEPRESSION
Alpha-delta sleep as replacement for delta sleep in various psychiatric patients with chronic fatigue and depression p0156 A73-22694

DEPRESSURIZATION
U PRESSURE REDUCTION

DEPRIVATION
NT SENSORY DEPRIVATION
NT SLEEP DEPRIVATION
NT WATER DEPRIVATION

DEPTH PERCEPTION
U SPACE PERCEPTION

DERMATOLOGY
Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/ [ASME PAPER 73-ENAS-26] p0350 A73-37981

DESCENT
NT PARACHUTE DESCENT

DESCENT PROPULSION SYSTEMS
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars [NASA-TM-X-2714] p0107 N73-15118

DESERT ADAPTATION
Thermal factor and dehydration influences on protidic and lipidic catabolisms of young men with partial food deprivation in hot climate, discussing metabolic balances p0125 A73-21248

Responses of men and women to two-hour walks in desert heat. p0360 A73-39784

On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity. p0396 A73-42164

On the multiplication of xerophilic micro-organisms under simulated Martian conditions. p0396 A73-42165

DESIGN OF EXPERIMENTS
U EXPERIMENTAL DESIGN

DESORPTION
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials p0087 A73-17681

Spacecraft polyurethane foam jacket sterilization by gas method, discussing ethylene oxide and methyl bromide sorption and desorption p0395 A73-42160

DESYNCHRONIZED SLEEP
U RAPID EYE MOVEMENT STATE

DETECTION
NT SIGNAL DETECTION
NT TARGET RECOGNITION

DETERGENTS
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes. p0579 A73-10625

Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/ [ASME PAPER 73-ENAS-26] p0350 A73-37981

Dermatological testing of personal hygiene cleansing agents and laundry detergents for possible use in Skylab Program [NASA-CR-128880] p0222 N73-20143

DEVICES
Design and development of biomedical prosthetic and electronic devices [NASA-CR-130022] p0140 N73-16093

DEWETTING
U DRYING

DEXTRANS
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate p0237 A73-28476

Effectiveness of polymer complex of cysteamine and sulfopropyl ester of dextran as an antiradiation drug on irradiated mice [DRIC-TRANS-2963] p0108 N73-15125

DIABATIC PROCESSES
U HEAT TRANSFER

DIABETES MELLITUS
Antidiabetic medications and aircrew p0128 A73-21541

Ribes Nigrum anthocyanosides in ophthalmology p0330 A73-36935

Argon laser radiation damage to retina of diabetic and nondiabetic patients [AD-747058] p0071 N73-13099

Suitability of insulin dependent and oral drug dependent diabetics as navigation personnel p0228 N73-21120

DIAGNOSIS
Certain aspects of the bionic analysis and control of dynamic systems p0580 A73-10658

Automated system of storing and processing vectorcardiograms p0580 A73-10660

Nonlinear method of analyzing electroencephalograms p0580 A73-10661

Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt. p0583 A73-11505

Diagnostic value of vectorcardiogram in strictly posterior infarction. p0047 A73-13891

Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening p0056 A73-14660

Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200
Numerical classification and coding of electrocardiograms.
p0059 A73-15647
Clinical diagnosis of angina pectoris, implicating obstructive disease of coronary arteries and effects of paroxysmal events on heart rate and blood pressure
p0085 A73-17277
Book - Peripheral vascular diseases: Diagnosis and management.
p0089 A73-17871
Echocardiography status, potentialities and requirements in congenital heart disease diagnosis, considering feasibility in left ventricular performance evaluation
p0243 A73-30053
Medical diagnosis of pilot performance disturbances from viewpoint of flight surgeon responsibilities
p0277 A73-31171
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525
A diagnostic program - Problems of predicting myocardial infarction on a digital computer
p0354 A73-38998
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826
The early diagnosis of coronary heart disease - Critical review.
p0404 A73-42827
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors
p0404 A73-42828
The value of different angiographic procedures in coronary heart disease.
p0405 A73-42831
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836
Microelectrophoresis of human erthyrocytes as diagnostic tool in gynecology and obstetrics
[NASA-TT-F-14587] p0069 N73-13077
Dynamic electrocardiographic standardization for detecting cardiac risk factor in personnel
p0145 N73-17066
Periodic health examinations and automatic processing of medical histories for detection and prevention of human diseases
p0145 N73-17074
Clinical practice and problems associated with urine analysis
p0147 N73-17089

DIALYSIS
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories.
p0403 A73-42678

DIAPHRAGM (ANATOMY)
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929
Volume-pressure characteristics of rib cage-diaphragm interaction in standing subjects during voluntary relaxation
p0359 A73-39778
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780
Control of the duration of expiration.
p0391 A73-41635

DIASTOLE
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685

DIASTOLIC PRESSURE
Left ventricular end-diastolic pressures following selective coronary arteriography.
p0583 A73-11508
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689

DICHLORIDES
Toxic effects of continuous exposure to dichloromethane vapor on dogs, monkeys, rats, and mice
[AD-746295] p0611 N73-11088
Effects of continuous methylene chloride exposure on spontaneous activity of mice for two weeks
[AD-751435] p0139 N73-16082
Toxic effects of chronic exposure to dichloromethane in liver microsomal cytochromes
[NASA-TM-X-69101] p0176 N73-18128

DIENCEPHALON
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280

DIETS
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet.
p0355 A73-39103
Effect of calcium-deficient diet on bone structure of pigs and dogs
[NASA-TT-F-13917] p0592 N73-10067
Therapeutic value of mineral water diets especially Karlsbad Muhlbrunn water
[NASA-TT-F-14620] p0069 N73-13079
Influence of repeated test and dietary counseling on hypercholesterolemia control in NASA employees
p0146 N73-17081
Stress effects on element balance in human waste for life support recycling system
p0184 N73-19107
Nutrient protein intake of rats and tolerance to acute hypoxia
p0263 N73-23035
Analysis of physiological effects of diet on personnel of Tenth Soviet Antarctic Expedition
p0379 N73-29358
Dynamics of weight change and variations in weight indices of internal organs in white mice as function of atmospheric composition and diet
p0443 N73-33022

DIFFERENTIAL AMPLIFIERS
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity p0166 A73-23849
Two channel transistor amplifier design with negative capacitance correction for microelectrode applications p0430 A73-44723
DIFFERENTIAL ANALYZERS
U ANALOG COMPUTERS
DIFFERENTIAL GEOMETRY
NT TENSOR ANALYSIS
DIFFERENTIATION (BIOLOGY)
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain p0575 A73-10151
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior p0051 A73-14259
Electrical operational and pneumatic /variometer/ differentiation recording of displaced volume derivative from pneumotachograph in spontaneous breathing p0159 A73-22937
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments p0397 A73-42172
DIFFRACTION
NT WAVE DIFFRACTION
DIFFRACTION PATTERNS
Differential light scattering patterns for identifying different species of bacteria p0147 N73-17090
DIFFUSION
NT GASEOUS DIFFUSION
NT MOLECULAR DIFFUSION
NT SPECIES DIFFUSION
NT THERMAL DIFFUSION
DIFFUSION PUMPS
Computer controlled infusion pump for time varying input of calcium into physiological systems [NASA-CASE-ARC-10447-1] p0101 N73-14092
DIGESTIVE SYSTEM
NT ESOPHAGUS
NT GASTROINTESTINAL SYSTEM
NT INTESTINES
NT PANCREAS
NT RECTUM
NT STOMACH
NT TEETH
Digestive hemorrhages in aircrew - Individual and collective safety p0332 A73-36952
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature. p0390 A73-41438
DIGITAL COMPUTERS
Human factors criteria for adaptive computer aiding in man-machine control system [AD-754835] p0222 N73-20147
Computerized teleoperator applications in manned aerospace systems p0270 N73-23904
DIGITAL DATA
Digital temperature-measuring device for medical applications p0236 A73-28338
DIGITAL FILTERS
Digital filters applicable to electroencephalographic pattern recognition. p0582 A73-11464
DIGITAL SIMULATION
A diagnostic program - Problems of predicting myocardial infarction on a digital computer p0354 A73-38998
A model of diffusion in the respiratory unit. p0391 A73-41638
Mathematical models for human performance in manned spacecraft control p0270 N73-23897
Vision model for robot object recognition system [NASA-CR-133458] p0365 N73-27936
Mathematical model and digital computer simulation of cardiovascular control system response to ergometer exercise p0446 N73-33049
DIGITAL SYSTEMS
Use of a response surface to optimize digital telecommunication systems. p0423 A73-43214
DIGITAL TECHNIQUES
Multidimensional coding for telemetric transmission of work load factors in ergonomics research. p0055 A73-14307
Numerical classification and coding of electrocardiograms. p0059 A73-15647
Compact digital coding of electrocardiographic data. p0097 A73-18815
DIGITIZERS
U ANALOG TO DIGITAL CONVERTERS
DIHEDRAL ANGLE
X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps p0308 A73-34893
DIMENSIONAL ANALYSIS
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms. p0089 A73-17860
Multidimensional scaling methods and data visualization /Review/ p0425 A73-43578
Physiology and dimensional analysis of semicircular canal [AMRU-R-69-1] p0606 N73-11058
DIMENSIONS
Functional dependence of semicircular canal on physical size p0109 N73-15139
DIOXIDES
NT CARBON DIOXIDE
NT HYDROGEN PEROXIDE
DIPHOSPHATES
NT ADENOSINE DIPHOSPHATE (ADP)
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes. p0386 A73-41139
DIPOLE MOMENTS
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data. p0394 A73-41961
DIRECT POWER GENERATORS
NT FUEL CELLS
DIRECTION FINDERS (RADIO)
U RADIO DIRECTION FINDERS
DIRECTIONAL CONTROL
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks p0095 A73-18470
DIRECTORIES
U INDEXES (DOCUMENTATION)
DISCHARGE TUBES
U GAS DISCHARGE TUBES
DISCONNECT DEVICES
Sea survival after ejection and parachute descent, describing hand operated canopy connector release to free pilot from entanglement or dragging p0284 A73-32665
DISCONNECTORS
U DISCONNECT DEVICES
DISCRIMINATION
NT BRIGHTNESS DISCRIMINATION
NT SENSORY DISCRIMINATION
NT TACTILE DISCRIMINATION
NT VISUAL DISCRIMINATION
DISCRIMINATORS
Amplitude discriminator with variable effective range design for use with/without digital computer in neuron pulsed activity analysis p0168 A73-24516
DISEASED VEGETATION
U BLIGHT

DISEASES
NT AEROSINUSITIS
NT ANEMIAS
NT ARTERIOSCLEROSIS
NT ATAXIA
NT CANCER
NT CARBON MONOXIDE POISONING
NT DIABETES MELLITUS
NT EDEMA
NT ENCEPHALITIS
NT EPILEPSY
NT HEART DISEASES
NT INFARCTION
NT INFECTIOUS DISEASES
NT INFLUENZA
NT KIDNEY DISEASES
NT LEAD POISONING
NT LITHIASIS
NT PARALYSIS
NT PARKINSON DISEASE
NT PNEUMONIA
NT PULMONARY LESIONS
NT RADIATION SICKNESS
NT RESPIRATORY DISEASES
NT SMALLPOX
NT SYPHILIS
NT TACHYCARDIA
NT THROMBOSIS
NT TOXIC DISEASES
NT TUBERCULOSIS
NT ULCERS
Absorption of fructose in saline mixture used for enteritis therapy of children
[NASA-TT-F-14596] p0609 N73-11078
Remote sensing techniques for detection and prevention of Rocky Mountain spotted fever, Encephalitis, Malaria, and Red Tide environmental health problems
[NASA-CR-128727] p0135 N73-16060
Chronic disease health trends and mortality rates in employee population of NASA Goddard Space Flight Center
p0147 N73-17086
Syringomyelia in central nervous system affecting flying fitness
p0266 N73-23061
Color and color infrared aerial photographic detection of Dutch elm disease
p0297 N73-25110
DISINFECTANTS
U ANTISEPTICS
DISORIENTATION
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
Study of Indian naval aircrew experiences and psychic factors in disorientation.
p0328 A73-36919
Aircraft pilot spatial disorientation and illusory perceptual break-off sensations during flight associated with minor vestibular asymmetry
p0356 A73-39111
Inverted posture illusion phenomenon in astronauts during weightless space flight, discussing vestibular organ function, acceleration effects and body gravitation sensing system
p0356 A73-39149
DISPERSIONS
NT AEROSOLS
NT COLLOIDS
NT NUCLEAR EMULSIONS
NT SMOKE
DISPLACEMENT MEASUREMENT
A linear motion generator for physiological research.
p0577 A73-10173
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026
Measuring characteristics of the displacement cardiograph.
p0403 A73-42676
Ultrasonic transducer instrument with broad beam dispersal for blood vessel displacement recording in chronic animal experimentation
p0408 A73-43109
DISPLAY DEVICES
NT APPROACH INDICATORS
NT HEAD-UP DISPLAYS
NT HOT-FILM ANEMOMETERS
NT POSITION INDICATORS
NT RADARSCOPES
NT RADIO DIRECTION FINDERS
NT TACHOMETERS
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload
[DGLR PAPER 72-097] p0584 A73-11666
Performance comparisons for joystick and track ball optimized control configurations operating in rate and position modes
p0081 A73-16706
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Human factors aspects in aircraft electronic display systems, discussing cathode ray tubes /CRT/ and light emitting diodes /LED/ applications and characteristics
p0204 A73-26500
Digital temperature-measuring device for medical applications
p0236 A73-28338
Detection of informational constraints related to multi-variate visual displays.
p0240 A73-29185
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task.
p0283 A73-32395
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241
Sorcerer Apprentice head mounted display with wand for interaction with computer generated synthetic objects, describing creation of illusory three dimensional environment
p0344 A73-37323
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
A study of the statistical patterns of visual perception of a black and white raster image
p0385 A73-40861
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions
p0393 A73-41887
Effect of the information panel structure on operator activity
p0394 A73-41889
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
Conference on manual control systems for human operator modeling and display systems in man machine environments
[NASA-SP-281] p0597 N73-10104
Hybrid computer identification program for visual display of adaptive control state to human operator
p0598 N73-10109
Design of computerized airborne traffic display device with alphanumerical control for aircraft pilots
p0598 N73-10112
Predictive display with continuous parameter tracking for quasi-linear model of human pilot transfer function in closed loop system
p0599 N73-10120
Optimal control model for predicting display requirements in pilot landing performance
p0599 N73-10121
Improved pilot performance using simulated pictorial landing display with symbols
p0599 N73-10122

Visual display format effects on pilot describing functions in manual tracking performance p0599 N73-10123
Utilization of simplified man machine interface concept to manage and control complex space system involving multiple redundant computers that control multiple redundant systems - Vol. 1 [NASA-CR-128576] p0603 N73-10145
Space shuttle orbiter subsystems and control and display data required for crew operations - Vol. 2 [NASA-CR-128577] p0603 N73-10146
Control and display sequences for four space shuttle orbiter mission phases - Vol. 4 [NASA-CR-128579] p0603 N73-10148
Analysis of reaction time to different visual cuing methods in large displays during secondary task performance [AD-747688] p0068 N73-12120
Methods of evaluating electronic cockpit display devices, emphasizing control, psychology, physiology, and subjective rating [DGLR-PAPER-72-97] p0074 N73-13118
Motion sickness in fixed-base car simulator with moving visual display [FFRC-1310] p0175 N73-18119
Accuracy of method of constant stimuli for studying sensory capabilities of man in relation to display systems [AD-753009] p0187 N73-19141
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station [NASA-CASE-MSC-14180-1] p0259 N73-22045
Conceptual design study for teleoperator visual system [NASA-CR-124273] p0300 N73-25133
Differences in speed of mentally processing displays containing information about right and left [AD-759723] p0334 N73-26070

DISPLAY SYSTEMS
U DISPLAY DEVICES
DISPOSAL
NT WASTE DISPOSAL
DISSIPATION
NT ENERGY DISSIPATION
DISSOCIATION
NT GAS DISSOCIATION
DISTANCE
Psychophysical functions of range and time estimates by ground and aerial observers [AD-747271] p0071 N73-13094
DISTANCE MEASURING EQUIPMENT
NT ALTIMETERS
DISTANCE PERCEPTION
U SPACE PERCEPTION
DISTORTION
Divers adjustment to underwater distortion [AD-744936] p0605 N73-10163
DISTRIBUTED PARAMETER SYSTEMS
A distributed parameter model of the inertially loaded human spine. p0315 A73-36429
DISTRIBUTION (PROPERTY)
NT ANTENNA RADIATION PATTERNS
NT DIFFRACTION PATTERNS
NT ENERGY DISTRIBUTION
NT FLOW DISTRIBUTION
NT FORCE DISTRIBUTION
NT FREQUENCY DISTRIBUTION
NT PRESSURE DISTRIBUTION
NT RADIATION DISTRIBUTION
NT SPATIAL DISTRIBUTION
NT SPECTRAL ENERGY DISTRIBUTION
NT STRESS CONCENTRATION
NT TEMPERATURE DISTRIBUTION
NT VELOCITY DISTRIBUTION
DISTRIBUTION FUNCTIONS
Recent measurements of flow using nuclear magnetic resonance techniques. p0171 A73-24855
DITCHING (LANDING)
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658
Ventilated wet suit for naval aircrews protection against water exposure in aircraft accidents, describing neoprene foam and nylon liner construction with air ventilation p0285 A73-32672

DITHIOLS
U THIOLS
DIURESIS
The effect of prolonged immobilization on diuresis and water intake in rats. p0203 A73-26489
Water and salt metabolism in hypokinesia-subjected animals p0207 A73-27704

DIURNAL RHYTHMS
U CIRCADIAN RHYTHMS
DIURNAL VARIATIONS
Drive and performance modification following multiple /light-light/ shifts in the photoperiod. p0154 A73-22528
Bactericide activity of the integument of man at different times of the day p0209 A73-27716
Industrial work rhythm and between-day fluctuation studies 1920-1969, emphasizing industrial record and between-day fluctuations p0287 A73-33160
Patterns of diurnal variation in the intraocular pressure of airline pilots. p0355 A73-39107
Visual responsiveness repeat variability magnitude during prolonged sessions and time of day p0357 A73-39479
Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle p0064 N73-12089
Diurnal cardiac rhythm fluctuation for cardiovascular evaluation of flight personnel p0254 N73-21997
Changes in diurnal variations of pilot performance in flight simulator compared with performance after transatlantic flights [DLR-FB-73-25] p0298 N73-25122

DIVING (UNDERWATER)
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions p0084 A73-16734
Human respiration under increased pressures. p0205 A73-26929
Underwater submersion and prolonged underwater submersion effects on diver tactile sensitivity [AD-743709] p0594 N73-10082
Visual evoked cortical response as measure of stress in naval environment, using rapid flash rates [AD-744934] p0595 N73-10088
Divers adjustment to underwater distortion [AD-744936] p0605 N73-10163
Mental functions of aquanauts during and after exposure to depths up to 160 m p0068 N73-13073
Cognitive functioning test to measure human performance in underwater diving stress [AD-748036] p0072 N73-13108
Deep diving pulmonary functions of man using different breathing gas densities [AD-749028] p0100 N73-14082
Apparent object movement due to optical distortion produced by head movement under water [AD-749319] p0101 N73-14086
Performance of battery powered electrically heated suit for reconnaissance divers [AD-749847] p0102 N73-14101
Calculation of minimum safe inspired gas temperature limits for deep diving [AD-748197] p0103 N73-14104
Visual evoked responses from divers subjected to hyperbaric conditions simulating depths to 1200 feet breathing various gas mixtures [AD-749325] p0108 N73-15127
Bibliography on role of vestibular apparatus in compressed air work underwater [AD-750686] p0109 N73-15133
Feasibility determination of cutaneous communication system for working divers [AD-750268] p0113 N73-15169
Anthropometric measurements of military personnel engaged in underwater diving to development standards for design of equipment [AD-748627] p0114 N73-15175

Blockage effect in external ear canal on diver auditory perception threshold
[AD-751664] p0177 N73-18132
Training procedure for improving divers distance estimation ability in clear and turbid water
[AD-752976] p0187 N73-19140
Diver monitoring system for physiologic studies in all hyperbaric environments
[AD-754399] p0224 N73-20154
Improving distance under water and long-term effectiveness of training
[AD-752979] p0299 N73-25128
Handedness and adaptation to distortions of size and distance underwater
[AD-759722] p0337 N73-26098

DNA
U DEOXYRIBONUCLEIC ACID
DOCKING
U SPACECRAFT DOCKING
DOCUMENT STORAGE
USAF NAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system p0155 A73-22539

DOCUMENTS
NT ABSTRACTS
NT BIBLIOGRAPHIES
NT HANDBOOKS
DOGS
Effect of calcium-deficient diet on bone structure of pigs and dogs
[NASA-TT-F-13917] p0592 N73-10067
Hyperammonemia development in metabolic toxicity of hydrazine
[AD-749519] p0100 N73-14077
Morphological changes in testes and spermatogenesis process of dogs subjected to chronic and combined gamma irradiation p0134 N73-16048
Prolonged weightlessness effects on physiological functions of dogs
[NASA-TT-F-14672] p0149 N73-17110
Vestibular analyzer functions in dogs after prolonged ionizing irradiation p0181 N73-19088
Influence of shielding head and anterior stomach on course of radiation sickness in dogs subjected to total lethal gamma irradiation p0213 N73-20073
GAST and GALT aminotransferases activity of dog blood serum following total exposure to gamma rays with stomach or head shielded p0213 N73-20075
Effect of transverse overloads and gamma rays at 100 to 200 r on peripheral blood in dogs p0214 N73-20083
Clinical hematological indices for evaluating vibration effect (70 Hz, 0.4 cm amplitude) on radiation reaction in dogs p0215 N73-20084
Morphological changes in liver of dogs subjected to chronic gamma radiation p0217 N73-20101
Leukopenic response of dog bone marrow for evaluating hematopoietic tissue function p0255 N73-22009
Influence of isolated heating of spinal column on respiratory rate and panting in dogs
[NASA-TT-F-14998] p0338 N73-27054
Behavior of dogs when given choice of various reinforcements p0449 N73-33066

DOMINANCE
NT EYE DOMINANCE
DOPPLER EFFECT
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements p0087 A73-17682
Doppler echocardiography - The localization of cardiac murmurs. p0432 A73-44947
Biophysical mechanisms of noninvasive measurement of CVP in man
[NASA-CR-130348] p0133 N73-16039

DORMANT VEGETATION
U VEGETATION
DOSAGE
NT RADIATION DOSAGE
NT SUBLETHAL DOSAGE
Effects of human biorhythms on chemotherapy and drug evaluation p0228 N73-21119

DOSE
U DOSAGE
DOSIMETERS
New norms and standardization trends for dosimetry and protection against radiation p0195 A73-25311
Personnel radiation protection technology and criteria review, discussing dosimeter specifications and automatic data processing p0195 A73-25314
Delta ray particle track structure theory for radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields p0196 A73-25423
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments. p0343 A73-37150
Proton dosimeter design for distributed body organs. p0424 A73-43389
Megarad plastic film dosimeter. p0427 A73-44212
Dosimetric determination of absorbed gamma and neutron radiation on human phantom
[AD-743005] p0593 N73-10077
Cosmic radiation dosage measurements on Apollo astronauts by Lexan dosimetry
[AD-745188] p0596 N73-10101
Dosimetric analyses for Biosatellite 2 yeast and artemia radiation exposure experiment
[NASA-CR-127142] p0069 N73-13082
Nuclear track dosimetry for monitoring cosmic ray exposure of Apollo 16 astronauts p0292 N73-24114
Lithium fluoride thermoluminescent dosimeter for measuring ionizing radiation exposure during Apollo 16 flight p0292 N73-24115

DOUGLAS MILITARY AIRCRAFT
U MILITARY AIRCRAFT
DOVAP
U DOPPLER EFFECT
DRAG
NT AERODYNAMIC DRAG
DRAG COEFFICIENT
U AERODYNAMIC DRAG
DRINKING
The role of the amygdaloid nuclei in the regulation of water intake p0382 A73-40278

DROGUES
U TOWED BODIES
DRONE HELICOPTERS
U HELICOPTERS
DROSOPHILA
Space flight factors effects on Drosophila development in terms of dominant, autosomal and sex-linked recessive lethals frequency, noting gametogenesis stage sensitivity p0397 A73-42173

DROWSINESS
U SLEEP
DRUG THERAPY
U CHEMOTHERAPY
DRUGS
NT ACTINOMYCIN
NT ADRENERGICS
NT ANTIADRENERGICS
NT ANTIBIOTICS
NT ANTICHOLINERGICS
NT ANTIDIURETICS
NT ANTIDOTES
NT ANTIINFECTIVES AND ANTIBACTERIALS
NT ANTIRADIATION DRUGS
NT ATROPINE
NT CENTRAL NERVOUS SYSTEM DEPRESSANTS
NT CENTRAL NERVOUS SYSTEM STIMULANTS
NT CHOLINERGICS
NT CORTISONE
NT EPINEPHRINE
NT HEMOSTATICS
NT HISTAMINES
NT INSULIN
NT MOTION SICKNESS DRUGS
NT NARCOTICS

NT NOREPINEPHRINE
NT PENTOBARBITAL SODIUM
NT SEDATIVES
NT STIMULANT
NT TRANQUILIZERS
Prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance.
[DFVLR-SONDDR-268] p0050 A73-14158
Effect of hydrochlorothiazide on +Gz tolerance in normotensives.
p0050 A73-14159
Guinea pigs used to determine effect of intramuscular injections of drugs on fall-out and Bekhterev nystagmus occurring after unilateral and bilateral labyrinthectomies
p0134 N73-16049
High temperature tolerance of rats under normal conditions, after thermal conditioning and combined with drugs
p0216 N73-20099
Feasibility determination for polyethylene packaging of drugs stocked in spacecraft pharmacies
p0218 N73-20114
In vitro metabolism of antipyrine in rats
[NASA-TT-F-14868] p0218 N73-20116
Metixenum and Meclocin under double blind comparison test conditions against motion sickness
p0226 N73-21100
Conference on detection, evaluation, and identification of drugs and alcohol in flying personnel and effects on flight fitness
[AGARD-CP-108] p0226 N73-21102
Drug screening data for civil aviation personnel obtained by urinalyses
p0226 N73-21104
Residual effects of hypnotic drugs on human nervous function and performance
p0226 N73-21106
Pilot performance and sleep patterns in long duration flights and control of hypnotic drug and alcohol use
p0226 N73-21107
Physiological aspects of sleep induction in aircrews after prolonged flight times
p0227 N73-21108
Adaptive tracking task for evaluating drug after-effects on human flight performance
p0227 N73-21109
Effects of isoniazid treatment on pilot performance
p0227 N73-21111
Sports medicine - parameters necessary for maintaining competitive form
p0227 N73-21114
Urinalysis methodology for detection of abusive and therapeutic drugs in man
p0228 N73-21117
Opthalmological examination of antimalarial drugs effects on performance of navigation personnel
p0228 N73-21122
Influence of altitude and drugs on cerebral circulation in smokers and non-smokers
p0229 N73-21125
Pathophysiological justifications for using drugs in aerospace medicine
[NASA-TT-F-736] p0257 N73-22033
Self-scanning chromatographic-fluorographic drug detector with optical readout system
[NASA-CASE-ARC-10633-1] p0259 N73-22048
DRY HEAT
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
Work-heat test comparisons of dry and wet heat and exercise programs for heat acclimatization
p0158 A73-22932
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Thermal inactivation of Bacillus subtilis var. niger spores on Viking lander
[NASA-CR-133223] p0333 N73-26058
Dry heat inactivation of atypical Bacillus subtilis var. niger spores in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
DRYING
NT DEHYDRATION
NT FREEZE DRYING
Survival of Arthrobacter crystallopoietes during prolonged periods of extreme desiccation.
p0119 A73-20026
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959
DTMB-111 GROUND EFFECT MACHINE
U GROUND EFFECT MACHINES
DTMB-430 GROUND EFFECT MACHINE
U GROUND EFFECT MACHINES
DUMMIES
Anthropometric dummy design improvements, detailing verisimilitude specifications for harness support in accident tests and design of chest, spine, shoulder and pelvic areas
p0306 A73-34617
Aircraft crash injury reduction through seat and restraint design, discussing dummy size considerations, seat belts, aircraft acceleration and injury types
[SAE PAPER 730290] p0306 A73-34655
DURATION
U TIME
DYES
The complications of coronary arteriography.
p0399 A73-42343
DYNAMIC CHARACTERISTICS
NT AERODYNAMIC DRAG
NT AERODYNAMIC STABILITY
NT DYNAMIC STABILITY
NT FLOW DISTRIBUTION
NT FLOW VELOCITY
NT FREQUENCY STABILITY
NT HOVERING STABILITY
NT TRANSIENT RESPONSE
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity
p0244 A73-30279
Dynamic operative image formation and function features during extrapolation tracking of visibly moving target, noting image reaction to operator performance
p0393 A73-41886
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions
p0393 A73-41887
Radioresistance recovery rate with combined exposure to ionizing radiation and dynamic factors (vibration and acceleration)
p0214 N73-20080
DYNAMIC CONTROL
Certain aspects of the bionic analysis and control of dynamic systems
p0580 A73-10658
The mathematics of coordinated control of prosthetic arms and manipulators.
[ASME PAPER 72-WA/AUT-4] p0061 A73-15884
Operator response to sinusoidally varying normal and emergency cycles in dynamic control task, testing anticipatory aversion response ability and error response
p0393 A73-41885
Operator visual perception mapping during parameter adjustment in dynamic control system
p0600 N73-10129
DYNAMIC LOADS
NT IMPACT LOADS
DYNAMIC MODELS
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for anthropomorphic locomotion system synthesis
p0581 A73-11052
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091

Ergatic modeling as dynamic goal-oriented physical process based on heuristic autonomous information-structured organization system with regulated model-human operator interaction p0241 A73-29418
A distributed parameter model of the inertially loaded human spine. p0315 A73-36429
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches p0408 A73-43103
Physical model selection for the balance preservation system in man p0431 A73-44903
Dynamics of the balance preservation system of man p0432 A73-44909
Conference on manual control systems for human operator modeling and display systems in man machine environments [NASA-SP-281] p0597 N73-10104
Human operator model for man machine control behavior in biodynamic flight environment p0597 N73-10105
Nonlinear multiparameter control model for human operator as vehicle controller p0597 N73-10106
Control theory model for pilot decision making based on estimated state of linear plant p0597 N73-10107
Input adaptive behavior model of human operator in pursuit tracking task p0597 N73-10108
Hybrid computer identification program for visual display of adaptive control state to human operator p0598 N73-10109
Matrix methods for dynamic modeling of human operator performance using Liapunov functions p0598 N73-10111
Manual control model structure for industrial management of man machine systems p0598 N73-10115
Dynamic model for nonlinear simulation of human postural control system using sticks p0599 N73-10116
Nonlinear model relating neural input to force and muscle contraction in human ankle joint p0599 N73-10117
Dynamic model of rotating spacecraft force effects on human vestibular system p0599 N73-10119
Predictive display with continuous parameter tracking for quasi-linear model of human pilot transfer function in closed loop system p0599 N73-10120
Optimal control model for predicting display requirements in pilot landing performance p0599 N73-10121
Semicircular canal model with flow visualization chamber for dynamic recording of canal fluid response to angular velocity effects p0111 N73-15153

DYNAMIC PROGRAMMING
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method p0354 A73-39000

DYNAMIC PROPERTIES
U DYNAMIC CHARACTERISTICS

DYNAMIC RESPONSE
NT TRANSIENT RESPONSE
Study of the acoustic reflex in human beings. I - Dynamic characteristics. p0581 A73-10828
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system. p0078 A73-16249
Space-time dynamics of the impulse activity in human-brain neuron populations p0080 A73-16692
Predictions of the dynamic response of the lung. p0116 A73-19477
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration. [ASME PAPER 73-DET-78] p0395 A73-42073
Neurophysiology and dynamic response of vestibular system to angular and linear acceleration [DR-215] p0606 N73-11057
Human operator adaptive behavior in slowly changing dynamic system [AD-748243] p0102 N73-14097
Dynamic electrocardiographic standardization for detecting cardiac risk factor in personnel p0145 N73-17066

DYNAMIC STABILITY
NT AERODYNAMIC STABILITY
NT FREQUENCY STABILITY
NT HOVERING STABILITY
Dynamics of the balance preservation system of man p0432 A73-44909

DYNAMIC STRUCTURAL ANALYSIS
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems [NASA-TT-F-14336] p0335 N73-26073
Systems engineering for design of two dimensional automatic manipulator control system using reversible follow-up p0335 N73-26081

DYNAMIC TESTS
Dynamic tests of seat belt system, seat belt/shoulder harness system, and seat belt airbag system for aircraft [FAA-NA-73-30] p0375 N73-29052

E

EAR
NT COCHLEA
NT CORTI ORGAN
NT EARDRUMS
NT LABYRINTH
NT MIDDLE EAR
NT SEMICIRCULAR CANALS
NT VESTIBULES
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light. p0581 A73-10973
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear. p0238 A73-28504
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/ p0249 A73-30843
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications. p0353 A73-38866
Physical correlations of hearing, auditory system, and hearing loss p0105 N73-15105
Functional reactions of human otorhinolaryngolic organs during hypokinesia p0256 N73-22015

EAR PRESSURE TEST
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals p0193 A73-25043

EAR PROTECTORS
Hearing conservation studies covering impulse noise produced threshold shift, damage risk criteria, ultrasound hazards and hearing protection p0309 A73-35326
Evaluation of hearing protectors for general aviation aircraft [NASA-CR-133303] p0341 N73-27078

EARDRUMS
Study of the acoustic reflex in human beings. I - Dynamic characteristics. p0581 A73-10828

EARPHONES
An earphone coupling system for acute physiological studies. p0581 A73-10829
Design and performance of wideband artificial ear for calibrating audiometric earphones [AD-746691] p0073 N73-13112

EARTH (PLANET)
Extraterrestrial intelligent life existence possibility in terms of hypothesis involving

earth as wilderness area or zoo with failure of interaction with other civilization
p0428 A73-44554

EARTH ATMOSPHERE
NT LOWER ATMOSPHERE
Solar flare frequency and associated physical phenomena diversity, discussing earth atmosphere protective effects and impact on Concorde flights
p0115 A73-19210

EARTH HYDROSPHERE
Influence of man on biospheric balance
[JPRS-59366] p0339 N73-27065

EARTH ORBITS
Habitability study of earth orbital space stations
[NASA-CR-124276] p0300 N73-25132
Cost estimating method for life support systems of manned earth orbital programs
[NASA-CR-124305] p0340 N73-27072

EARTH PLANETARY STRUCTURE
The sources of phosphorus on the primitive earth - An inquiry.
p0090 A73-17933

EARTH RESOURCES
NT CORN
NT FARM CROPS
NT FORESTS
NT GRAINS (FOOD)
NT LAKES
NT ROCKS
NT SHALES
NT VEGETATION
NT WATER RESOURCES
Problems of environmental pollution and natural resource depletion caused by man
[JPRS-58113] p0151 N73-17121

EARTH SATELLITES
NT BIOSATELLITE 2
NT COMMUNICATION SATELLITES
NT MOON
Interface requirements for design and development of Physiology of Chimpanzees in Orbit experiment
[NASA-CR-131397] p0220 N73-20130

EARTH SURFACE
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490

ECHOCARDIOGRAPHY
Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements
p0087 A73-17682
Estimation of left ventricular size by echocardiography.
p0159 A73-22999
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
Echocardiography status, potentialities and requirements in congenital heart disease diagnosis, considering feasibility in left ventricular performance evaluation
p0243 A73-30053
Book on echocardiography covering examination of mitral, aortic, tricuspid and pulmonic valves, ventricles, atrium, pericardial effusion, coronary artery disease and tumors
p0245 A73-30358
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400

ECHOES
Orbit and superior orbital fissure acoustic window for cranium posterior structures imaging by echoencephalographic techniques
p0402 A73-42667

ECOLOGICAL SYSTEMS
U ECOLOGY

ECOLOGY
Russian book on mathematical models of biological systems covering biogeocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems
p0154 A73-22347
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787
Problems of environmental pollution and natural resource depletion caused by man
[JPRS-58113] p0151 N73-17121

ECONOMIC FACTORS
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857

ECONOMICS
Psychological, physiological, and work hygiene problems in ergonomic technology
[JPRS-58792] p0260 N73-22050

EDEMA
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167
Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
Centrineurogenic etiology for pulmonary changes of high altitude pulmonary edema
[AD-756940] p0294 N73-24127
Measurement of pulmonary extravascular water volume during exposure to simulated high altitude
[AD-763355] p0418 N73-31004

EDUCATION
NT ASTRONAUT TRAINING
NT FLIGHT TRAINING
NT PILOT TRAINING
Civil aviation medicine functional standardization and expansion, emphasizing preventive medicine, health education and operational safety
p0170 A73-24718
Cybernetic application of computers in personnel training
[AD-751145] p0178 N73-18143

EDUCATIONAL TELEVISION
Satellite telecommunications systems for childhood education
[NASA-CR-133028] p0300 N73-25131

EEG (ELECTROENCEPHALOGRAMS)
U ELECTROENCEPHALOGRAPHY

EFFECTIVE PERCEIVED NOISE LEVELS
Noise standards for habitable houses, rest homes, hospitals, camps, public facilities, and streets in residential areas
[NASA-TT-F-15065] p0414 N73-30088

EFFECTIVENESS
NT COST EFFECTIVENESS
NT SYSTEM EFFECTIVENESS
Pilot ground training proficiency of flight simulators
[AD-755681] p0341 N73-27081

EFFECTORS
U CONTROL EQUIPMENT
EFFERENT NERVOUS SYSTEMS
Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle p0581 A73-11023
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study. p0047 A73-13808
Method for quantitative estimation of the functional state of the motor apparatus p0047 A73-13822
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles p0084 A73-16735
Electrophysiological investigation of suprasegmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics p0118 A73-20001
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia p0154 A73-22365
Structural characteristics of connections between medial efferent systems and spinal cord neurons p0156 A73-22577
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys p0156 A73-22578
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli p0156 A73-22579
Voluntary activation of individual motor units in man p0168 A73-24519
Reflex excitability of spinal motor neurons in man under high atmospheric pressure p0169 A73-24525
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle p0170 A73-24599
Functional and morphological structures of motor activity events, noting central integration ensemble of cerebrum transmitter sequences p0194 A73-25200
Motor functions and control of sensorial messages of somatic origin p0240 A73-29174
Intranuclear organization of the center median nucleus of the thalamus. p0240 A73-29175
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers p0242 A73-29875
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity p0242 A73-29990
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation p0242 A73-30022
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli p0349 A73-37943
Russian book - Electrical activity of the human brain in the process of motor action. p0389 A73-41289
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord p0435 A73-45249
Effects of radioprotective drugs on motor evacuatory functions in gastrointestinal tracts of healthy and irradiated rats p0212 N73-20062
EFFICIENCY
NT COMBUSTION EFFICIENCY
NT ENERGY CONVERSION EFFICIENCY
Examination of man machine systems efficiency in relation to cost criteria p0414 N73-30087
EGGS
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/. p0282 A73-32185
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina. p0315 A73-36129
Effect of sonic boom on fish and fish eggs during developmental stage [PAA-RD-73-29] p0219 N73-20121
EIGENFUNCTIONS
U EIGENVECTORS
EIGENSTATES
U EIGENVECTORS
EIGENVECTORS
Eigenvectors of the sensitivity variations across the human central fovea. p0407 A73-42957
EJECTION
Sea survival after ejection and parachute descent, describing hand operated canopy connector release to free pilot from entanglement or dragging p0284 A73-32665
EJECTION INJURIES
Surveillance of the vertebral column in pilots who have undergone an ejection p0328 A73-36914
Nonfatal ejection vertebral fracture comparison between US, British, and Swedish armed services p0265 N73-23059
ELASTIC CONSTANTS
U ELASTIC PROPERTIES
ELASTIC MODULUS
U MODULUS OF ELASTICITY
ELASTIC PROPERTIES
NT MODULUS OF ELASTICITY
NT VISCOELASTICITY
Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways p0048 A73-14114
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique. p0084 A73-17098
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow p0126 A73-21375
A model for the elastic properties of the lung and their effect on expiratory flow. p0126 A73-21502
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient. p0275 A73-31128
The role of the elastic properties of brain and spine cavities in hyperemia compensation p0322 A73-36572
Influence of elastic properties of human body on arterial blood pressure measurement p0099 N73-14072
ELASTIC SHELLS
Impact on a simple physical model of the head. p0170 A73-24770
ELASTIC WAVES
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT NOISE (SOUND)
NT SHOCK WAVES
NT SONIC BOOMS
NT SOUND WAVES
NT ULTRASONIC RADIATION
Analysis of pressure waves as a mean of diagnosing vascular obstructions. p0346 A73-37524
ELASTICITY
U ELASTIC PROPERTIES
ELBOW (ANATOMY)
EMG measurement on male adults for muscular relaxation reaction time interval from light

stimulus onset to elbow flexor response
p0045 A73-13699
ELECTRIC ANALOGIES
U ANALOGIES
ELECTRIC BATTERIES
Performance of battery powered electrically heated suit for reconnaissance divers [AD-749847]
p0102 N73-14101
ELECTRIC BRIDGES
NT WHEATSTONE BRIDGES
ELECTRIC CHARGE
NT ELECTRIC DIPOLES
ELECTRIC CIRCUITS
U CIRCUITS
ELECTRIC DIPOLES
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Gaussian curve simulation of multiple-dipole model of ventricular depolarization [TB-71-E-25]
p0067 N73-12116
ELECTRIC FIELD STRENGTH
A method for studying the action of high-intensity electric fields on microorganisms
p0167 A73-24419
Electrical field distribution in the human body.
p0427 A73-44216
ELECTRIC FIELDS
Origin of the external electric field detected near animals and men
p0166 A73-23942
ELECTRIC FILTERS
NT DIGITAL FILTERS
NT OPTICAL FILTERS
ELECTRIC GENERATORS
NT FUEL CELLS
ELECTRIC IMPULSES
U ELECTRIC PULSES
ELECTRIC POTENTIAL
NT BIOELECTRIC POTENTIAL
NT SPIKE POTENTIALS
ELECTRIC PULSES
Automatic pulse count recorder, discussing circuit, performance and applications to laboratory and clinic
p0580 A73-10663
ELECTRIC STIMULI
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion
p0080 A73-16696
Three channel transistorized pulse generator for electric stimuli used in electrophysiological studies
p0084 A73-16739
Influence of different motor regimes on the convulsive reactivity of the central nervous system.
p0085 A73-17178
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003
Electrical stimulation effects of human eye on photic threshold for square wave vision as function of wavelength, orientation and spatial frequency
p0121 A73-20260
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
Neuron analyzer technique for poststimulus histogram plotting of neuron excitation as function of stimulus onset time
p0165 A73-23811
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus
p0199 A73-26087
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness
p0280 A73-31515
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test
p0285 A73-33091
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents

p0401 A73-42652
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation
p0428 A73-44550
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
Physiological and pathological responses of humans exposed to electricity
[NASA-CR-128422] p0592 N73-10065
Behavioral learning response of cat to electric stimulation of auditory nervous system
[NASA-CR-132047] p0293 N73-24124
Cross correlation analysis of stress rhythm during stimuli of varying biological significance
p0450 N73-33071

ELECTRIC STRAIN GAGES
U STRAIN GAGES
ELECTRIC WELDING
NT ELECTRON BEAM WELDING
ELECTRICAL CONDUCTIVITY
U ELECTRICAL RESISTIVITY
ELECTRICAL IMPEDANCE
NT ELECTRICAL RESISTANCE
ELECTRICAL MEASUREMENT
NT COULOMETRY
NT POLAROGRAPHY
ELECTRICAL PROPERTIES
NT CAPACITANCE
NT ELECTRICAL RESISTANCE
NT ELECTRICAL RESISTIVITY
NT ELECTRON MOBILITY
NT POLARIZATION CHARACTERISTICS
ELECTRICAL RESISTANCE
The specific resistance of blood at body temperature.
p0402 A73-42670
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
ELECTRICAL RESISTIVITY
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
ELECTRO-OPTICS
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657
Measurement of control mechanism of accommodation-vergence eye movement system in human eyes using electro-optical measuring instrument
p0411 N73-30062
ELECTROACOUSTIC TRANSDUCERS
NT LOUDSPEAKERS
NT MICROPHONES
An earphone coupling system for acute physiological studies.
p0581 A73-10829
ELECTROCARDIOGRAMS
U ELECTROCARDIOGRAPHY
ELECTROCARDIOGRAPHY
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891
P wave of electrocardiogram in early ischaemic heart disease.
p0048 A73-13892
Multichannel PDM-FM biomedical radio telemetry system for ECG, respiratory rate and oxygen consumption during exercise, considering transmitter and receiver design
p0052 A73-14278
Blood flow and pressure and ECG data acquisition and transmission via radio telemetry system with electromagnetic flowmeter
p0052 A73-14283
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292
Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise
p0053 A73-14293
Telemetrical measurements during sport performance on sportsmen with cardiac arrhythmias.
p0054 A73-14294
A remotely operated ECG telemeter for chronic implantation in rats.
p0054 A73-14303
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
Telemetry of cardiovasculary parameters on fighter aircraft flying pilots.
p0055 A73-14309
Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening
p0056 A73-14660
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643
Use of an on-line computer in a study of cardiac arrhythmia.
p0059 A73-15644
Numerical classification and coding of electrocardiograms.
p0059 A73-15647
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648
Book - Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
Compact digital coding of electrocardiographic data.
p0097 A73-18815
Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches.
p0115 A73-19152
Orthogonal versus planar vector-electrocardiography.
p0118 A73-19930

A method for electrocardiogram recording in Rhesus monkeys
p0126 A73-21324
Electromagnetic 60 Hz interference in ECG recordings, discussing sources, identifying tests, elimination and ECG amplifier design
p0163 A73-23648
Heart activity characteristics in a human operator during a control process
p0164 A73-23806
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity
p0166 A73-23849
Cardiac potential measuring and recording instrument with 240 probes, presenting circuit and block diagrams
p0167 A73-24422
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions
p0198 A73-25598
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction.
p0201 A73-26287
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal
p0245 A73-30387
The information content of successive RR-interval times in the ECG - Preliminary results using factor analysis and frequency analysis.
p0251 A73-30883
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction.
p0286 A73-33115
Phase progression of the QRS complexes in electrocardiograms versus the inscribing directions of the QRS loops in vectorcardiograms.
p0286 A73-33116
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.

p0287 A73-33375
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Advances in electrocardiography; Proceedings of the Symposium, Emory University, Atlanta, Ga., May 10-13, 1971.
p0318 A73-36516
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts and their detection on the body surface.
p0319 A73-36518
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
Diagnostic power of the Q wave - Critical assay of its significance in both detection and localization of myocardial deficit.
p0319 A73-36527
Mid- and late changes in the QRS complex.
p0320 A73-36528
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542
Electrocardiographic diagnosis of myocardial infarction - Pitfalls of a graphic technique.
p0321 A73-36544
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and

patients with atrial overload.
p0399 A73-42341
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342
Russian book - Integral topograms of heart potentials.
p0401 A73-42489
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization
p0405 A73-42835
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836
Signal processing in medical technology
p0424 A73-43317
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946
Electronic instruments for continuous cardiovascular systems measurements
[NASA-TT-F-14492] p0604 N73-10154
Design and attachment of skin electrodes in human cardiac monitoring during space flight
p0065 N73-12095
Electrocardiogram recordings on magnetic tape for computerized analysis
[AD-748105] p0075 N73-13124
Threshold circuits with feedback channels for cardiac R-wave detection in electrocardiographic heart rate monitoring
[NASA-TM-D-7152] p0112 N73-15158
Changes in electrocardiographs of Rhesus monkeys as function of age
[NASA-TT-F-14675] p0136 N73-16062
Dynamic electrocardiography in periodic health examinations for detection of cardiac abnormalities
p0144 N73-17065
Dynamic electrocardiographic standardization for detecting cardiac risk factor in personnel
p0145 N73-17066
Electrocardiographic stress testing for determining influence of occupational and other stresses on ischemic heart disease
p0146 N73-17082
Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] p0232 N73-21151
Development of electrocardiogram protection circuits to prevent accidental electrocution and digital cardiotachometer system to display heart rate
p0261 N73-22924

ELECTROCHEMICAL CELLS
NT ELECTRIC BATTERIES
NT FUEL CELLS
Hydrogen depolarized cell for removing CO2 in spacecraft life support systems
[NASA-CR-131868] p0259 N73-22047
Electrochemical process for recovery of oxygen from atmospheres of manned space capsules
[NASA-CR-114573] p0300 N73-25130

ELECTROCHEMISTRY
NT COULOMETRY
NT ELECTROLYSIS
Electrochemical system with solid electrolyte for regenerating oxygen from CO2 and H20
p0441 N73-33015

ELECTROCUTANEOUS COMMUNICATION
Electrocutaneous parameters for designing dynamic tactual communication system
p0230 N73-21135

ELECTRODERMAL RESPONSE
U GALVANIC SKIN RESPONSE

ELECTRODES
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
A method for electrocardiogram recording in Rhesus monkeys
p0126 A73-21324
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
Technique for extemporaneously obtaining an electroencephalogram
p0330 A73-36937
Design and attachment of skin electrodes in human cardiac monitoring during space flight
p0065 N73-12095
Obtaining stable oxygen electrodes by coating with plasma catalyzed polymer film
[AD-748422] p0074 N73-13120
Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] p0232 N73-21151
Equipment for implanting electrodes in subcortical structures of cat brain
[NASA-TT-F-15001] p0366 N73-27947

ELECTROENCEPHALOGRAM
U ELECTROENCEPHALOGRAPHY

ELECTROENCEPHALOGRAPHY
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152
Nonlinear method of analyzing electroencephalograms
p0580 A73-10661
Digital filters applicable to electroencephalographic pattern recognition.
p0582 A73-11464
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263
Three channel FM telemetry system for long term EEG monitoring, discussing routine clinical operation results
p0054 A73-14298
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
EEG alterations by short time stress due to delayed speech feedback during reading, noting alpha and beta wave changes
p0056 A73-14473
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
Application of frequency discrimination technique to the analysis of electroencephalographic signals.
p0057 A73-15052
Status and prospects of EEG spectral analysis.
p0058 A73-15278
New developments in EEG signal processing.
p0058 A73-15279
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Statistical correlation between human mental activity and EEG beta rhythm wave energy and frequency characteristics
p0092 A73-18159
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
Rabbit hippocampal neuron activity relation to theta-wave phases from cell potential and extracellular recording analyses

p0118 A73-20005
German monograph - Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram.
p0122 A73-20391
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
Non-Gaussian properties of the EEG during sleep.
p0126 A73-21465
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Modification of the electroencephalograph 4EEG-1 for polygraphy
p0154 A73-22370
Alpha-delta sleep as replacement for delta sleep in various psychiatric patients with chronic fatigue and depression
p0156 A73-22694
Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
Biopotential alpha and theta rhythms of neocortex and hippocampus of milk drinking cats after food and water deprivation
p0157 A73-22862
Correlation analysis of the bioelectrical activity of the brain during mental work
p0163 A73-23678
Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response
p0166 A73-24326
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing
p0194 A73-25143
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet.
p0195 A73-25327
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
Comparative analysis of the electrical activity of the cortex and of cerebral subcortical formations in the process of the alteration of conditioned reactions
p0205 A73-27104
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106

Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity
p0242 A73-29990
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
Alpha wave peak amplitude dependence on blocking pattern after stimulation during habituation-pseudoconditioning, conditioning and extinction
p0242 A73-29992
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381
Sleep behaviour as a biorhythm.
p0286 A73-33158
Automatic analysis and classification of electroencephalograms
p0309 A73-34966
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915
Technique for extemporaneously obtaining an electroencephalogram
p0330 A73-36937
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Similarities and differences concerning the sleep of two baboons, Papio hamadryas and Papio papio
p0359 A73-39764
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli
p0363 A73-39804
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013
Russian book - Electrical activity of the human brain in the process of motor action.

p0389 A73-41289
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
Signal processing in medical technology
p0424 A73-43317
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
Application of factor analysis to the encephalographic characterization of sleep
p0430 A73-44722
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio
p0434 A73-45159
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Frequency discriminator for on-line measurements of entrainment and synchronization in EEG signals as related to human alertness
[NASA-CR-129173] p0611 N73-11091
Electronic detectors and computer software for analyzing human electroencephalographs in isolated environment
[AD-751272] p0142 N73-16105
Use of photostimulation in electroencephalographic tests of flying personnel and candidates at flight schools
p0218 N73-20111
Neurophysiology of sleep and wakefulness in fish, amphibians, birds, and reptiles
p0257 N73-22025
Electroencephalographic and behavioral responses of humans to aircraft noise during sleep
[NASA-CR-2279] p0338 N73-27058
Effect of simulated sonic booms and overpressure on EEG waveform patterns and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
Recording human electroencephalogram under influence of muscle noise
p0443 N73-33025
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anesthetized rabbits
p0449 N73-33069
Orientative-investigative reaction as factor changing configuration of evoked potentials during repeated light flashes
p0449 N73-33070
Cross correlation analysis of stress rhythm during stimuli of varying biological significance
p0450 N73-33071

ELECTROEXPLOSIVE DEVICES
U INITIATORS (EXPLOSIVES)

ELECTROHYDRAULIC CONTROL
U HYDRAULIC CONTROL

ELECTROLUMINESCENCE
Human factors aspects in aircraft electronic display systems, discussing cathode ray tubes /CRT/ and light emitting diodes /LED/ applications and characteristics
p0204 A73-26500

ELECTROLUMINESCENT LAMPS
U ELECTROLUMINESCENCE

ELECTROLYSIS
NT COULOMETRY
Design and performance of prototype nitrogen/oxygen supply unit using water/hydrazine electrolysis to provide cabin leakage makeup in manned spacecraft
[NASA-CR-128688] p0112 N73-15159
Long term performance test on electrolytic oxygen generator for manned test chamber
[NASA-CR-128687] p0112 N73-15160

ELECTROLYTE METABOLISM
Renal vascular response to saline infusion from radioactive Ie washout and sodium excretion concentration data
p0577 A73-10170
Cation exchange binding of rubidium and cesium by rat liver cell microsomes.
p0588 A73-12549
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters
p0156 A73-22649
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport
p0197 A73-25594
Sinoatrial node pacemaker cell functions, discussing ionic and metabolic principles, electrical activity, membranal effects of neurohormonal control factors and cardioactive drug effects
p0197 A73-25595
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
Water and salt metabolism in hypokinesia-subjected animals
p0207 A73-27704
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Transductal fluxes of Na, K, and water in the human eccrine sweat gland.
p0281 A73-31923
Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689
Physiological regulatory mechanisms of water and electrolyte levels in human body in high temperature environment
[NASA-TT-F-13915] p0592 N73-10066

ELECTROLYTES
NT ION EXCHANGE MEMBRANE ELECTROLYTES
Electrochemical system with solid electrolyte for regenerating oxygen from CO2 and H2O
p0441 N73-33015

ELECTROLYTIC POLARIZATION
Ionic current mechanisms for cardiac muscle

repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies
p0197 A73-25593

ELECTROMAGNETIC ABSORPTION
NT ULTRAVIOLET ABSORPTION
The structure and reactions of visual pigments.
p0160 A73-23306
Bee image detection by ommatidium based on physical model using electromagnetic analysis of light absorption in photoreceptor
p0424 A73-43344

ELECTROMAGNETIC CONTROL
U REMOTE CONTROL

ELECTROMAGNETIC FIELDS
Physiological effects of microwave electromagnetic fields on human and animal organisms, considering etiology, diagnostics and prophylaxis
p0093 A73-18256
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Physical and psychological effects of electromagnetic fields on human and animal central nervous system
p0248 A73-30571
Theoretical study of biological hazards from exposure to ELF electrical fields and potentials
[AD-743480] p0595 N73-10093
Penetrating ionizing space radiations with diversity in energy range of both particulate and electromagnetic components
p0105 N73-15100

ELECTROMAGNETIC INTERACTIONS
Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788

ELECTROMAGNETIC INTERFERENCE
NT RADIO FREQUENCY INTERFERENCE
NT WHITE NOISE
Hazard and interference avoidance in implant telemetry, discussing leakage currents, muscle interference, magnetic influence, high frequency noise, electrode and respiratory artifacts, etc
p0054 A73-14295
Electromagnetic 60 Hz interference in ECG recordings, discussing sources, identifying tests, elimination and ECG amplifier design
p0163 A73-23648

ELECTROMAGNETIC MEASUREMENT
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992
Comparison of plethysmographic and electromagnetic flow measurements.
p0427 A73-44215

ELECTROMAGNETIC NOISE
NT WHITE NOISE

ELECTROMAGNETIC PROPAGATION
U ELECTROMAGNETIC WAVE TRANSMISSION

ELECTROMAGNETIC PROPERTIES
NT BRIGHTNESS
NT COLOR
NT ELECTROMAGNETIC ABSORPTION
NT LUMINOSITY
NT OPTICAL PROPERTIES
NT RADIANCE
NT REFLECTANCE
NT TURBIDITY

ELECTROMAGNETIC RADIATION
NT GAMMA RAYS
NT INFRARED RADIATION
NT LIGHT (VISIBLE RADIATION)
NT LIGHT BEAMS
NT MICROWAVES
NT MILLIMETER WAVES
NT MONOCHROMATIC RADIATION
NT POLARIZED LIGHT
NT RADIO WAVES
NT SUBMILLIMETER WAVES
NT THERMAL RADIATION
NT TWILIGHT GLOW
NT ULTRAVIOLET RADIATION
NT X RAYS
Overview of the biological effects of electromagnetic radiation.
p0240 A73-29211
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964
Bibliography on radio frequency and microwave radiation effects in biological systems
[AD-750271] p0108 N73-15131
Operant behavior of rhesus monkeys in presence of extremely low frequency, low intensity magnetic and electric fields
[AD-754058] p0230 N73-21134

ELECTROMAGNETIC SCATTERING
NT LIGHT SCATTERING

ELECTROMAGNETIC SPECTRA
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787

ELECTROMAGNETIC WAVE FILTERS
NT OPTICAL FILTERS

ELECTROMAGNETIC WAVE TRANSMISSION
NT LIGHT SCATTERING
NT LIGHT TRANSMISSION
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396

ELECTROMAGNETIC WAVES
U ELECTROMAGNETIC RADIATION

ELECTROMAGNETICS
U ELECTROMAGNETISM

ELECTROMAGNETISM
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027

ELECTROMETERS
Modification and updating of the bioelectric DS2C amplifier for a FET input.
p0159 A73-22936

ELECTROMYOGRAMS
U ELECTROMYOGRAPHY

ELECTROMYOGRAPHS
U ELECTROMYOGRAPHY

ELECTROMYOGRAPHY
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119
EMG measurement on male adults for muscular relaxation reaction time interval from light stimulus onset to elbow flexor response
p0045 A73-13699
Variability of normal glabellar and supraorbital reflexes in man
p0045 A73-13748
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
Method for quantitative estimation of the functional state of the motor apparatus
p0047 A73-13822
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold
p0126 A73-21323

Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328
Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus
p0199 A73-26087
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity
p0242 A73-29990
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799
Electromyographic study of repetitive fasciculation potentials in triceps and adductor pollicis in normal subjects and patients with motor neuron diseases, noting postcontraction pause
p0359 A73-39761
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372
Reflex arch lability in rabbits at synchronous maximum frequency of electromyographic and muscle stretching vibration measurement
p0401 A73-42659
Action of stable and pulsed noise on the processes of skeletal muscle excitation
p0402 A73-42662
Effects of direct auditory feedback of electromyogram on learning to control single unit
[AD-745107] p0605 N73-10165
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134] p0142 N73-16104

ELECTRON BEAM WELDING
Health hazards in using electron beams for welding beryllium alloys
p0190 N73-19531

ELECTRON MICROSCOPES
Electron-microscopy investigation of Corti's organ after noise trauma
p0078 A73-16333
Responses of indigenous microorganisms to soil incubation as viewed by transmission electron microscopy of cell thin sections.
p0241 A73-29724

ELECTRON MICROSCOPY
U ELECTRON MICROSCOPES

ELECTRON MOBILITY
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes.
p0579 A73-10625
Photosensitized inhibitor formation in isolated, aging chloroplasts.
p0122 A73-20453

ELECTRON PHOTOGRAPHY
Electroradiography technique involving photoproduction of free electrons via Townsend avalanche amplification in diode /triode/ gap, noting increased quantum efficiency
p0427 A73-44214

ELECTRON TRANSFER
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707

ELECTRON TUBES
NT CATHODE RAY TUBES

ELECTRONIC CONTROL
A linear motion generator for physiological research.
p0577 A73-10173
Voltage controlled attenuator circuit for acoustic signal duration and repetition control in hearing examinations
p0432 A73-44910
Structural design of computer controlled manipulator for remote handling
p0335 N73-26079
Design of electrohydraulic control system for underwater manipulator with position feedback
p0336 N73-26085
Bioelectric control system design for reversible slave mechanism manipulator using single muscle input
p0336 N73-26088
Motor function modeling of human arm by manipulator using myoelectric control pulses
p0336 N73-26091

ELECTRONIC EQUIPMENT
NT ELECTRONIC TRANSDUCERS
NT FIELD EFFECT TRANSISTORS
NT GALLIUM ARSENIDE LASERS
NT METAL OXIDE SEMICONDUCTORS
NT MINIATURE ELECTRONIC EQUIPMENT
NT SOLID STATE DEVICES
NT TRANSISTOR AMPLIFIERS
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
Tasks analyses to determine technical personnel requirements for maintenance of Navy microelectronic shipboard equipment
[AD-748040] p0074 N73-13123
Computerized design of fighter aircraft cockpit electronic control system considering man machine interaction
p0270 N73-23905
Calibrator for biaxial electronic platforms designed to measure postural equilibrium
[AD-763093] p0377 N73-29066

ELECTRONIC TRANSDUCERS
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512

ELECTRONS
NT PHOTOELECTRONS

ELECTROPHORESIS
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Free electrophoresis in zero gravity on Apollo 16 flight
[NASA-CR-123920] p0606 N73-11055
Microelectrophoresis of human erthyrocytes as diagnostic tool in gynecology and obstetrics
[NASA-TT-F-14587] p0069 N73-13077
Free electrophoresis space experiment design for weightlessness environments
[NASA-CR-123972] p0101 N73-14090
Design of electrophoretic mass screening tester for sickle cell anemia
p0231 N73-21140

ELECTROPHYSICS
NT ELECTRO-OPTICS

ELECTROPHYSIOLOGY
An earphone coupling system for acute physiological studies.
p0581 A73-10829
Structural organization and electrophysiological properties of the intercentral functional systems of the hypothalamic region of the brain
p0581 A73-11024
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
Mathematical analysis of body surface potentials.
p0059 A73-15646
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements
p0060 A73-15787
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331

Book - Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359
Electroretinography /ERG/, electro-oculography /EOG/, visual evoked response /VER/ and electric evoked response /EER/ procedures for electrophysiological investigation of visual system
p0080 A73-16484
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
Three channel transistorized pulse generator for electric stimuli used in electrophysiological studies
p0084 A73-16739
Electrogastrographic data pertinent to exposures in a pressure chamber to moderate hypoxia levels
p0087 A73-17684
Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches.
p0115 A73-19152
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Rapid eye movement analyzer.
p0156 A73-22697
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843
Sinusoidal stimuli induced electrical activity of hippocampus in waking rhesus monkeys and baboons
p0167 A73-24330
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
Papers on cardiac electrophysiology covering heart cells, membrane mechanism, molecular structure, excitation-contraction coupling, muscular ion transport, synaptic and atrioventricular transmissions, healing, etc
p0197 A73-25588
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647
Human visual evoked response signal decomposition by complex demodulation in terms of after-discharge time, envelope and frequency parameters
p0203 A73-26497
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Intranuclear organization of the center median nucleus of the thalamus.
p0240 A73-29175
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.
p0247 A73-30517
German monograph - Comparative investigations regarding the phenomenon of force potentiation in the case of the heart muscle of cold-blooded and warm-blooded animals.
p0249 A73-30669
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Memory fixation during sleep, discussing EEG, EOG, EMG and ECG recordings for differences between light and paradoxal sleep
p0280 A73-31749
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286
Russian book - Methods of studying eye movements.
p0283 A73-32417
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
A universal preamplifier for bioelectric signals
p0383 A73-40345
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926
Electrical field distribution in the human body.
p0427 A73-44216
Anatomic and functional organization of the ventral anterior and reticular nuclei of the thalamus
p0429 A73-44675
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
Effects of intraperitoneally administered hydrazine on electrophysiology, general behavior, and performance of cats
[AD-746014] p0609 N73-11081
Electrophysiological sleep patterns of human and animal brains
[NASA-TT-F-740] p0257 N73-22023
Analysis of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026

ELECTROPLETHYSMOGRAPHY
Stroke volume measurement from an integral rheogram of human body
p0429 A73-44719

ELECTRORETINOGRAPHY
ERG late photoreceptor potential components time course in macaque monkey cones and rods, noting pure cone foveal response
p0046 A73-13761
Electroretinography /ERG/, electro-oculography /EOG/, visual evoked response /VER/ and electric

evoked response /EER/ procedures for electrophysiological investigation of visual system
p0080 A73-16484
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
The electroretinogram, as analyzed by microelectrode studies.
p0162 A73-23318
Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay
p0162 A73-23319
Electroretinogram recovery cycle during light adaptation and after dark adaptation
p0168 A73-24518
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353
Cone spectral sensitivity studied with an ERG method.
p0236 A73-28358
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Scotopic electroretinography and visual evoked responses under adaptive illumination, comparing blind spot stray light with parafoveal stimulation
p0237 A73-28361
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
Stimulus luminance-duration relationship of adapting light effect in human electroretinography, referring to Bunsen-Roscoe and Bloch constant law
p0237 A73-28363
The macular and paramacular local electroretinograms of the human retina and their clinical application.
p0237 A73-28364
Oscillatory waves in intraretinally recorded electroretinograms in primates, considering electrode depth, stimulus duration and intensity and background illumination, anesthesia and tetrodotoxin effects
p0245 A73-30393
Localized electroretinography capable of maintaining constant light scattering with small angular dimensions by employing Ulbricht principle of uniformly illuminated sphere
p0308 A73-34963
Modeling, instrumentation and data evaluation in clinical electroretinography, discussing Fourier analysis of sinusoidal light stimulation response in normal and abnormal humans
p0310 A73-35359
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250

ELECTROSTATIC FIELDS
U ELECTRIC FIELDS
ELEMENTARY PARTICLES
NT FAST NEUTRONS
NT LIGHT BEAMS
NT PHOTOELECTRONS
NT PHOTONS
NT PIONS
ELIMINATION
Hyperoxia effects on elimination of carbon monoxide, ammonia, ketones, and aldehydes by rats
p0063 N73-12077
EMBOLISMS
NT AEROEMBOLISM
The complications of coronary arteriography.
p0399 A73-42343

EMBRYOLOGY
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Effect of sonic boom on fish and fish eggs during developmental stage
[FAA-RD-73-29] p0219 N73-20121
EMBRYOS
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation
p0242 A73-30022
Comparison of development of auditory vesicle in frog embryos under weightless and terrestrial conditions
[NASA-TT-F-14624] p0592 N73-10072
EMERGENCIES
Pilot incapacitation as cause for aircraft operational risks, discussing flight crews education for emergency situations handling
p0170 A73-24717
Requirements and equipment for space shuttle emergency intravehicular activity and effectiveness of emergency procedures - Vol. 5
[NASA-CR-133995] p0419 N73-31010
EMERGENCY LIFE SUSTAINING SYSTEMS
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach.
p0196 A73-25342
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines.
p0329 A73-36922
Crew safety for in-flight spacecraft emergencies
[NASA-TT-F-14997] p0339 N73-27068
Crew survival after emergency landing or ditching in unpopulated areas
[NASA-TT-F-15047] p0376 N73-29053
EMISSION
NT BIOLUMINESCENCE
NT CHEMILUMINESCENCE
NT ELECTROLUMINESCENCE
NT FLUORESCENCE
NT LIGHT EMISSION
NT LUMINESCENCE
NT SPECTRAL EMISSION
NT X RAY FLUORESCENCE
EMISSION SPECTRA
Collection of marine fluorescence data from Atlantic, Gulf, and Pacific sites
[NASA-CR-114579] p0298 N73-25115
EMISSIVITY
Spectral emissivity of skin and pericardium.
p0427 A73-44213
EMISSOGRAPHS
U ACTINOMETERS
U RECORDING INSTRUMENTS
EMOTIONAL FACTORS
Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance
p0082 A73-16720
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects
p0088 A73-17770
Emotional stresses during a space flight
p0116 A73-19297
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328
Experimental study of emotional stress in operators
p0193 A73-25038
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329

Psychopharmacology in treating psychiatric diseases, negative emotions, and nerve stimulation, discussing tranquilizers synthesis and effects p0207 A73-27497
Changes in blood-flow distribution during acute emotional stress in dogs. p0238 A73-28533
Emotional overstress effects on the indices of the blood coagulation system in monkeys p0249 A73-30846
A device for the continuous measurement of subjective changes p0285 A73-33090
The mechanisms of the occurrence of emotional stress in man. p0328 A73-36920
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys p0347 A73-37755
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type' p0362 A73-39797
Experimental analysis of conditions for onset of emotional stress p0362 A73-39800
Effect of a subjective ambiquity estimate concerning the duration of work on activity regulation p0394 A73-41892
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease p0405 A73-42837
The effect of anxiety control on the level of information processing p0425 A73-43848
Analysis of cosmonaut emotional stress as determined by physiological and behavioral responses [NASA-TT-F-14654] p0067 N73-12113
Indices of emotional stress in cosmonauts during Voskhod 2 and Soyuz flights [JPRS-58039] p0148 N73-17104

EMOTIONS
Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response p0166 A73-24326
Participation of cholinergic mechanisms in negative human emotions p0362 A73-39799
Sentography - Dynamic forms of communication of emotion and qualities. p0427 A73-44180
Influence of emotional states on human operator performance and efficiency p0414 N73-30085
Various types of corticopetal influences from deep-seated emotiogenic formations of brain p0449 N73-33068

EMPLOYEE RELATIONS
Comparison of the job attitudes of personnel in three air traffic control specialties. p0355 A73-39108

EMPLOYMENT
Workshop for teaching professional unemployed personnel competitive job searching techniques [PB-209367] p0604 N73-10159
Results from employment workshop program for unemployed aerospace engineers and scientists [PB-209366] p0605 N73-10168

EMULSIONS
NT NUCLEAR EMULSIONS

ENCEPHALITIS
Remote sensing application to habitat of mosquito vectors of disease, considering St. Louis and Venezuelan encephalitis strains and human filariasis p0363 A73-39866

ENCODING
U CODING

ENDOCRINE GLANDS
NT ADRENAL GLAND
NT GONADS
NT PANCREAS
NT PINEAL GLAND
NT PITUITARY GLAND
NT THYROID GLAND

ENDOCRINE SECRETIONS
NT ALDOSTERONE
NT HORMONES
NT HYDROXYCORTICOSTEROID
NT INSULIN
NT PITUITARY HORMONES
NT THYROXINE
Multiple hormonal responses to graded exercise in relation to physical training. p0048 A73-14116
Human endocrine-metabolic responses to graded oxygen pressures. p0116 A73-19479
Binding of Melatonin to human and rat plasma proteins. p0170 A73-24657
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens p0235 A73-28283
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects p0282 A73-32286
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/. p0326 A73-36795
Physiologic cost of prolonged double-crew flights in C-5 aircraft. p0386 A73-41152
Conference on human endocrine secretions and hormone metabolisms during space flight stress [NASA-TM-X-58093] p0173 N73-18104
Measurements of endocrine metabolic responses to space flight stress on Apollo 14 and Apollo 15 crewmen p0173 N73-18105
Radioimmunoassay of urinary antidiuretic hormone excretion in man considering water loading and dehydration effects p0174 N73-18107
Measurement of antidiuretic hormone excretions in human urine as indication of neurosecretory stress response during space flight p0174 N73-18108
Water immersion model for simulating renin, aldosterone, and natriuresis effects of prolonged weightlessness on man p0174 N73-18110
Influence of long duration flight missions on metabolic and endocrine functions of pilots and navigators p0189 N73-19152

ENDOCRINE SYSTEMS
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia p0249 A73-30847
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism p0281 A73-31875

ENDOGENOUS CONDITIONS
U PHYSIOLOGY

ENDOLYMPH
Endolymph fluid mechanics in semicircular canals approximated by rigid torus filled with incompressible Newtonian fluid p0315 A73-36430

ENDOTHELIUM
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium p0408 A73-43105

ENDOTOXINS
Effects of endotoxin on monoamine metabolism in the rat. p0582 A73-11100

ENDURANCE
Optimal duration of endurance performance on the cycle ergometer in relation to maximal oxygen intake. p0283 A73-32397

ENERGY ABSORPTION
NT ELECTROMAGNETIC ABSORPTION
NT THERMAL ABSORPTION
NT ULTRAVIOLET ABSORPTION

ENERGY BUDGETS
Energy balance during moderate exercise at altitude. p0277 A73-31343
ENERGY CONVERSION
Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[COO-3162-9] p0070 N73-13091
ENERGY CONVERSION EFFICIENCY
Electroradiography technique involving photoproduction of free electrons via Townsend avalanche amplification in diode /triode/ gap, noting increased quantum efficiency p0427 A73-44214
ENERGY DISSIPATION
Effect of adaptation to cold on the energy characteristics of muscular activity p0235 A73-28295
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials p0280 A73-31549
Biological order, structure and instabilities in terms of irreversible thermodynamic processes, entropy, dissipative structures, randomness, abiogenesis, hierarchic organization, chemical reactions and molecular biology p0281 A73-31824
Energy balance and change in body weight and body water in man during a 2-day cold exposure. p0433 A73-45059
Evaluation of energy expenditures and reactions of cardiovascular and respiratory systems to physical work
[NASA-TT-F-15090] p0437 N73-31997
ENERGY DISTRIBUTION
NT SPECTRAL ENERGY DISTRIBUTION
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant p0128 A73-21540
ENERGY EXCHANGE
U ENERGY TRANSFER
ENERGY LOSSES
U ENERGY DISSIPATION
ENERGY REQUIREMENTS
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters p0156 A73-22649
ENERGY SOURCES
Energy supply in acute cold-exposed dogs. p0324 A73-36655
ENERGY SPECTRA
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements p0060 A73-15787
Frequency of heavy ions in space and their biologically important characteristics. p0398 A73-42178
ENERGY TRANSFER
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range p0088 A73-17748
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatigue p0278 A73-31393
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs p0279 A73-31505
Effect of training with eccentric muscle contractions on skeletal muscle metabolites. p0390 A73-41523
Charged particle energy deposition calculations for radiobiological system
[ORO-3798-52] p0070 N73-13090
ENGINE INLETS
Wind tunnel tests to determine structural integrity of birds under conditions simulating ingestion of birds into inlets of high speed aircraft
[NASA-TM-X-68163] p0106 N73-15114
ENGINE NOISE
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure. p0425 A73-43500
ENTHALPY
Enthalpy values for reaction of retarding mononucleotides with ribonuclease and thermodynamic parameters for enzyme inhibitor interactions
[PBNG-PBNT-72-12] p0137 N73-16073
ENTOMOLOGY
Investigation of oribatid mites found in Antarctic regions during Tenth Soviet Antarctic Expedition p0379 N73-29349
ENTROPY
Computerized correlation analysis of single and multiple neuron pulse activity, considering temporal, sequential and entropy characteristics p0579 A73-10653
Thermodynamics of self assembly - An empirical example relating entropy and evolution. p0090 A73-17932
Biological order, structure and instabilities in terms of irreversible thermodynamic processes, entropy, dissipative structures, randomness, abiogenesis, hierarchic organization, chemical reactions and molecular biology p0281 A73-31824
ENVIRONMENT EFFECTS
Developments in space medicine. p0086 A73-17569
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system p0089 A73-17775
Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes p0096 A73-18577
Mountain inhabitants physiological characteristics due to altitude effects, investigating human tolerance and adaptation to ambient environment p0116 A73-19212
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment p0154 A73-22364
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular p0157 A73-22926
Predicting heart rate response to work, environment, and clothing. p0158 A73-22931
Coronary flow and left ventricular function during environmental stress. p0162 A73-23380
Aviation medicine assessment of environment effects on pilot responsiveness, task performance and flight safety predictability, considering temperature, oxygen, gravity, acceleration, pressure and stress effects p0193 A73-25039
Implications of psychoanalytic factors for Air Force operations. p0196 A73-25340
Gravitational effects on biological systems in terms of animal body size, age, sex and posture as factors affecting acceleration tolerance p0197 A73-25573
Results and prospects of microbiological studies in outer space. p0203 A73-26487
The evolution of lignin - Experiments and observations. p0241 A73-29649
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions. p0284 A73-32600
A standard psychophysiological preparation for the study of environmental stress. p0286 A73-33130
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum. p0384 A73-40808

Direct and indirect environmental factors affecting functional state of operators
p0414 N73-30084

ENVIRONMENT MANAGEMENT
Man and natural environment protection and management
[JPRS-59369] p0339 N73-27064

ENVIRONMENT POLLUTION
NT AIR POLLUTION
NT WATER POLLUTION
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787
Problems of environmental pollution and natural resource depletion caused by man
[JPRS-58113] p0151 N73-17121
Environmental factors and cost problems of selecting optimum sanitary landfill site for solid waste disposal
[NASA-CR-128744] p0189 N73-19157
Man induced changes in earth climate by environment pollution and heat production
[PB-213676/2] p0267 N73-23074

ENVIRONMENT PROTECTION
Man and natural environment protection and management
[JPRS-59369] p0339 N73-27064
Solution to problem of endangered living space
[NRC-TT-1636] p0376 N73-29057

ENVIRONMENT SIMULATION
NT ACOUSTIC SIMULATION
NT ALTITUDE SIMULATION
NT SPACE ENVIRONMENT SIMULATION
NT THERMAL SIMULATION
NT WEIGHTLESSNESS SIMULATION
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards
p0396 A73-42162
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165

ENVIRONMENT SIMULATORS
Human habitability data for zero gravity environmental architecture
[NASA-TM-X-69322] p0295 N73-24135

ENVIRONMENTAL CHAMBERS
U TEST CHAMBERS

ENVIRONMENTAL CONTROL
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Space Shuttle Orbiter Environmental Control and Life Support System for atmosphere revitalization, crew life support, thermal conditioning and airlock support
[ASME PAPER 73-ENAS-23] p0350 A73-37979
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983
Environmental control unit for damage control suit system for use during shipboard operations
[AD-749025] p0075 N73-13125
Capabilities and limitations of man as element in closed loop control system under normal environmental conditions
p0106 N73-15107
Atmospheric control studies, emphasizing carbon dioxide problem
p0106 N73-15108
Remote sensing techniques for detection and prevention of Rocky Mountain spotted fever, Encephalitis, Malaria, and Red Tide environmental health problems
[NASA-CR-128727] p0135 N73-16060
Medical concepts and functional management in NASA Environmental Health Program
p0143 N73-17056
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program
p0143 N73-17057
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAR-10076-1] p0221 N73-20137
Conservational and rational use of natural resources and wildlife to preserve biosphere environment
[JPRS-58429] p0222 N73-20145
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043
Solution to problem of endangered living space
[NRC-TT-1636] p0376 N73-29057
Operational principles and functions of mnemonic diagrams in controlled system
p0414 N73-30083
Space shuttle environmental and thermal control/life support system
[NASA-CR-134009] p0415 N73-30091
Environmental sanitation handbook for occupational medicine and health procedures at Kennedy Space Center
[NASA-TM-X-69522] p0440 N73-32020

ENVIRONMENTAL ENGINEERING
German monograph - Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man.
p0047 A73-13818
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
Ergonomic solution to organizational problems of human living conditions and activities
p0413 N73-30080

ENVIRONMENTAL TEMPERATURE
U AMBIENT TEMPERATURE

ENVIRONMENTAL TESTS
NT UNDERWATER TESTS
Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies
p0049 A73-14123
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001
Analysis of research activities conducted to determine criteria for passenger comfort in various methods of transportation
p0591 N73-10024
Design of microbial test system for Apollo 16 mission
p0291 N73-24103

ENVIRONMENTS
NT AEROSPACE ENVIRONMENTS
NT EXTRATERRESTRIAL ENVIRONMENTS
NT HIGH ALTITUDE ENVIRONMENTS
NT HIGH GRAVITY ENVIRONMENTS
NT HIGH TEMPERATURE ENVIRONMENTS
NT JUPITER ATMOSPHERE
NT LOW TEMPERATURE ENVIRONMENTS
NT LUNAR ENVIRONMENT
NT MARINE ENVIRONMENTS
NT MARS ATMOSPHERE
NT MARS ENVIRONMENT
NT PLANETARY ATMOSPHERES
NT ROTATING ENVIRONMENTS
NT SPACECRAFT ENVIRONMENTS

NT THERMAL ENVIRONMENTS
ENZYME ACTIVITY
NT FERMENTATION
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans.
p0045 A73-13598
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
Mechanisms of certain functional shifts during change in the blood of the content level of external pancreatic-gland secretion components
p0081 A73-16700
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
A mechanism for polypeptide synthesis on a protein template.
p0090 A73-17943
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
Solvent effects on enzymes - Implications for extraterrestrial life.
p0091 A73-17948
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
Action of a serum protein on muscular contraction.
p0125 A73-21200
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
Effects of experimental conditions on parameter estimated when using the Hill model
p0153 A73-21872
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.
p0196 A73-25568
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
Age pecularities of whole-blood transketolase activity in healthy persons
p0276 A73-31164
Fibrinolytic activity of urine in healthy persons
p0276 A73-31165
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600
Activity variations of some renal enzymes during stepwise increased hypoxia
p0323 A73-36582
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle.
p0385 A73-41130
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes.
p0386 A73-41139
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430
Desoxyribonucleases in sweat gland secretion of man
p0429 A73-44674
Lactate origins and renewal in blood plasma, considering metabolism, enzymatic resynthesis and final excretion in urine
p0434 A73-45157
Procedure for assaying enzyme activity in soils and application to presumptive life tests in Martian soil
[NASA-CR-128399] p0591 N73-10059
Complete activity of lactate dehydrogenase and isoenzymes in plasma and myeloid cells
[NASA-TT-F-14586] p0592 N73-10070
Effects of hypoxia and acceleration stresses on enzyme activities in erythrocytes and blood plasma
[DLR-FB-72-71] p0137 N73-16070
Gas environment effect on catalase cryolysis
p0185 N73-19121
Inhibiting and activating effect of mono- and bi-quaternary pyridioxide reactivators on bovine erythrocyte cell membrane
[BMVG-FBWT-72-9] p0187 N73-19138
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826] p0216 N73-20093
Ultraviolet space irradiation effects on Aeromonas proteolytica extracellular enzyme production
p0292 N73-24111
Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Variations of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroid in blood during physical work noting physical training dependence
[DLR-FB-72-48] p0412 N73-30072
ENZYMES
NT CATALASE
NT CHOLINESTERASE
NT HEXOKINASE
NT NUCLEASE
NT OXIDASE
NT TRYPSIN
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
Behavior of enzyme activities in blood plasma after breathing hyperbaric oxygen
[DLR-FB-71-96] p0112 N73-15163
Role of respiratory enzymes on human adaptation to hypoxia

[NASA-TT-F-15058] p0411 N73-30060
ENZYMOLOGY
Proton magnetic resonance spectra and calorimetry of interactions between ions, inhibitors, and substrates with two ribonucleases
[BNYG-FBWT-72-7] p0137 N73-16071
Enthalpy values for reaction of retarding mononucleotides with ribonuclease and thermodynamic parameters for enzyme inhibitor interactions
[FNYG-FBWT-72-12] p0137 N73-16073
Proton magnetic resonance spectra of ribonuclease A inhibitor complexes, noting effect on catalytic activity
[BNYG-FBWT-72-13] p0137 N73-16074
EOSINOPHILS
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
EPIDEMIOLOGY
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value.
p0059 A73-15521
USAF WAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system
p0155 A73-22539
Risk factors for developing myocardial infarction and other diseases - The 'Men born in 1913' study.
p0245 A73-30352
Prevention of the atherosclerotic diseases - Opportunities for military medicine.
p0248 A73-30518
Air-transport, a main cause of smallpox epidemics today.
p0326 A73-36791
EPIDERMIS
Mitotic activity in dorsal epidermis of Rana pipiens.
p0122 A73-20456
EPILEPSY
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082
Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381
EPINEPHRINE
NT NOREPINEPHRINE
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
Cardiovascular effects of fluorocarbon exposure, emphasizing epinephrine sensitivity
[AD-751427] p0140 N73-16091
Effect of cysteamine combined with adrenalin and phenamine on reparative processes following irradiation and overload
p0214 N73-20081
Epinephrine oxidation and indole production during high pressure oxygen poisoning
[AD-759405] p0339 N73-27061
EPITHELIUM
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
Modified rhodopsin in the pigment epithelium.
p0121 A73-20263
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510
EPNL
U EFFECTIVE PERCEIVED NOISE LEVELS
EPOCHS
U TIME MEASUREMENT
EPOXY COMPOUNDS
NT ETHYLENE OXIDE
NT HYOSCINE
EQUILIBRIUM
Auditory rail task for acoustic stimuli effects on human equilibrium under axisymmetric intermittent tone exposure, discussing acoustic energy effect on vestibular receptors
p0044 A73-13551
Calibrator for biaxial electronic platforms designed to measure postural equilibrium
[AD-763093] p0377 N73-29066
Instrument for measurement of postural equilibrium in human beings
[AD-763096] p0377 N73-29067
EQUIPMENT
Bibliography on effects of underwater environment on tools, equipment, and human performance
[AD-748000] p0074 N73-13122
EQUIPMENT SPECIFICATIONS
Personnel radiation protection technology and criteria review, discussing dosimeter specifications and automatic data processing
p0195 A73-25314
Standard requirements for ultrasonic Doppler probes of cardiovascular systems in medical monitoring functions
p0063 N73-12083
ERGOMETERS
Muscle, skin and esophageal temperature measurement during transient and steady state phases of negative work exercise on bicycle ergometer
p0048 A73-14112
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Laddermil and ergometry - A comparative summary.
p0194 A73-25183
Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] p0366 N73-27941
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] p0439 N73-32014
ERGONOMICS
U HUMAN FACTORS ENGINEERING
ERROR ANALYSIS
Ancillary information effects on photointerpretation performance under four imagery system operation modes, noting identification accuracy independence on information variables
p0093 A73-18245
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks
p0117 A73-19548
Searching for many targets - An analysis of speed and accuracy.
p0311 A73-35498
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113
Determination of performance precision and informativeness of electronic models of the sensory system of man
p0432 A73-44911
Refutation of microbial ability to reduce phosphate using thermochemical computations
[NASA-TT-F-14724] p0069 N73-13081
Bloch law error in visual perception of capacitor discharge brightness
[AD-749452] p0104 N73-14109
Workload effects on operator grip pressure and neuromuscular transmission in manual tracking task error
[AD-757252] p0269 N73-23089
Error analysis on manipulator activation system using reversible self adaptive control mechanism
p0336 N73-26084
ERRORS
NT INSTRUMENT ERRORS
NT PILOT ERROR
NT POSITION ERRORS
NT VELOCITY ERRORS

Clinical practice and problems associated with urine analysis
p0147 N73-17089
Effect of human operator errors on reliability and effectiveness of his work
[AD-764937] p0441 N73-32028

ERYTHROCYTES
NT RETICULOCYTES
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor P from reticulocytes in the respiratory chain
p0588 A73-12510
A criterion for oxygen supply optimality in tissues and the capillary circulation rate
p0047 A73-13821
Differentiations and maturations in red and white blood cells construction in red bone marrow, noting hematopoietic system formation from single source cell
p0085 A73-17473
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.
p0196 A73-25568
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate
p0237 A73-28476
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations.
p0310 A73-35460
Red cell volume with changes in plasma osmolarity during maximal exercise.
p0324 A73-36654
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes.
p0386 A73-41139
Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions
p0426 A73-43929
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521
Erythrocyte volume in acidified venous blood from exercising limbs.
p0436 A73-45557
Erythrocyte preservation in blood transfusion practice by cryogenic freezing with polyvinylpyrrolidone
[NASA-TT-F-14590] p0069 N73-13076
Microelectrophoresis of human erthyrocytes as diagnostic tool in gynecology and obstetrics
[NASA-TT-F-14587] p0069 N73-13077
Inhibiting and activating effect of mono- and bi-quaternary pyridioxide reactivators on bovine erythrocyte cell membrane
[BMVG-FBWT-72-9] p0187 N73-19138
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes
[AD-749323] p0258 N73-22035
Biophysical properties of human red blood cells exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072
Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030

ESCAPE (ABANDONMENT)
Impact, emergency escapes, and crash survival studies
p0105 N73-15097

ESCHERICHIA
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107

ESOPHAGUS
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525

ESTERS
NT GLUTAMATES
NT ISOCYANATES
NT LACTATES
Effectiveness of polymer complex of cysteamine and sulfopropyl ester of dextran as an antiradiation drug on irradiated mice
[DRIC-TRANS-2963] p0108 N73-15125

ESTIMATES
NT COST ESTIMATES
Pilot visual threshold and perception for aircraft movement estimation during unaided visual approach control
p0600 N73-10125

ETHYL ALCOHOL
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481
Blood plasma hyperosmolality and antidiuretic hormone inhibition in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079
Guide to units and interpretation of blood alcohol measurements
[DCIEM-TM-848] p0175 N73-18120
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989

ETHYLENE
Toxicity of pyrolysis products from chlorotrifluroethylene-ethylene copolymer Halar resin
[AD-751436] p0138 N73-16080

ETHYLENE OXIDE
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Analysis of resistance of cultured and natural microbes in ethylene oxide sterilization method
[NASA-TT-F-14612] p0069 N73-13078

ETIOLOGY
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen.
p0238 A73-28511

EUCLIDEAN GEOMETRY
NT PROJECTIVE GEOMETRY

EVACUATING (TRANSPORTATION)
International Congress of Aeronautical and Space Medicine, 20th, Nice, France, September 18-21, 1972, Reports
p0327 A73-36901
Evaporation rates and toxic plume dispersion for defining downwind evacuation areas for populations adjacent to accidental propellent spills on shipping routes
[NASA-TM-X-68188] p0141 N73-16097
Computerized simulation of passenger emergency evacuation efficiency using Boeing 720 aircraft models
[FAA-AM-72-30] p0150 N73-17119

EVALUATION
Methods of evaluating electronic cockpit display devices, emphasizing control, psychology, physiology, and subjective rating
[DGLR-PAPER-72-97] p0074 N73-13118

EVAPORATION
NT PROPELLANT EVAPORATION

EVENTS
NT CONSECUTIVE EVENTS
EVOLUTION (DEVELOPMENT)
NT ABIOGENESIS
NT BIOLOGICAL EVOLUTION
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970. p0050 A73-14255
Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development p0051 A73-14256
Maturing neuronal subsystems - The dendrites of spinal motoneurons. p0051 A73-14257
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior p0051 A73-14259
Developmental changes in neurochemistry during the maturation of sleep behavior. p0051 A73-14261
Development of wakefulness-sleep cycles and associated EEG patterns in mammals. p0051 A73-14263
Wakefulness and sleep states in developing organism, discussing REM sleep deprivation effects on behavior, brain excitability, pharmacology and biochemistry p0052 A73-14265
Evolution of ribonuclease in relation to polypeptide folding mechanisms. p0057 A73-15047
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus p0090 A73-17929
Evolution of man-machine-hybrid integration in evolving social structure
[AMRU-R-68-3] p0608 N73-11069
Evolution of structural, cytochemical, and functional organization of gravity receptors in invertebrates and vertebrates
[NASA-TT-F-720] p0220 N73-20128
Influence of blue green algae on crystalline calcium carbonate formation on river rocks
[NASA-TT-F-15028] p0375 N73-29046
EXAMINATION
NT EYE EXAMINATIONS
EXCHANGING
NT GAS EXCHANGE
NT ION EXCHANGING
EXCITATION
NT MOLECULAR EXCITATION
Influence of excitation surface with liminary brightness on different regions of the retina
[NASA-TT-F-15124] p0440 N73-32017
EXCITED STATES
U EXCITATION
EXCRETION
Renal vascular response to saline infusion from radioactive Xe washout and sodium excretion concentration data p0577 A73-10170
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives. p0196 A73-25333
Circadian rhythm of urinary calcium excretion during immobilization. p0247 A73-30512
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males. p0325 A73-36786
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature. p0390 A73-41438
Lactate origins and renewal in blood plasma, considering metabolism, enzymatic resynthesis and final excretion in urine p0434 A73-45157
EXECUTIVE AIRCRAFT
U GENERAL AVIATION AIRCRAFT
U PASSENGER AIRCRAFT
EXERCISE (PHYSIOLOGY)
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir p0584 A73-11925
Muscle, skin and esophageal temperature measurement during transient and steady state phases of negative work exercise on bicycle ergometer p0048 A73-14112
Pulse duration-frequency modulation multichannel biotelemetry system for physiological parameter assessment during exercise, noting circuit diagrams of radio transmitter and receiver p0052 A73-14281
Telemetry and ergometry associated to the measure of oxygen consumption during sports events. p0053 A73-14285
Telemetry of venous blood pressure at rest and at muscle activity during running. p0053 A73-14290
Postural effects on respiration, pulmonary ventilation, oxygen uptake and inhalation and exhalation volumes during asana /yoga gymnastics/ exercises executed by athletes p0322 A73-36573
Aerobic capacity of relatively sedentary males. p0353 A73-38360
Effect of exercise on the response time in an identification problem p0394 A73-41894
Effect of temporal uncertainty on human energy expenditure during moderate exercise
[AD-743726] p0594 N73-10084
Weight, blood pressure, and intraocular pressure in young healthy males prior to and after 50-km walk
[NASA-TT-F-14557] p0608 N73-11071
Physiological effects of high mountain alpinism exercises on human body p0135 N73-16058
Physiological and hemodynamic adaptations to CO levels and exercise in nonsmoking normal men
[PB-213834/1] p0267 N73-23073
Physiological response to prolonged muscular activity p0271 N73-23990
Exercise effects on human heart rate and oxygen uptake p0371 N73-29020
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
Mathematical model and digital computer simulation of cardiovascular control system response to ergometer exercise p0446 N73-33049
EXERTION
U PHYSICAL WORK
EXHAUST FLOW SIMULATION
NT FLIGHT SIMULATION
EXHAUST GASES
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars
[NASA-TM-X-2714] p0107 N73-15118
Physical and chemical characteristics, and biological activity of exhaust from beryllium-fueled motor
[AD-756531] p0259 N73-22042
EXHAUST JETS
U EXHAUST GASES
EXHAUST SYSTEMS
Design and performance of exhaust hood with protective air current outside of hood surface p0144 N73-17063
EXHAUSTION
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatigue p0278 A73-31393

Various opinions on physical and mental exhaustion caused by atmospheric ion shortage
[NASA-TT-F-14646] p0070 N73-13088
EXOBIOLOGY
Book - Theory and experiment in exobiology. Volume 2.
p0055 A73-14315
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319
Biological, chemical and cytological methods of microorganism detection integrated into single instrument
p0056 A73-14320
Quarantine necessity, protocol and effectiveness for Mars samples, emphasizing risks of foreign replicating agent introduction to earth biosphere
p0056 A73-14321
Developments in space medicine.
p0086 A73-17569
Space exploration and the origin of life.
p0090 A73-17930
Solar system other planets suitability for terrestrial organisms, noting life forms possible existence on Venus, Mars and Jupiter
p0094 A73-18349
Indigenous lunar organic compound search, considering prebiological chemistry and composition possibility in deeper region under surface
p0095 A73-18428
Survival of micro-organisms on the moon.
p0115 A73-19111
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Results and prospects of microbiological studies in outer space.
p0203 A73-26487
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
International literature survey of microbiological space research for 1930-1970, discussing high altitude balloon, rocket and satellite experiments, weightlessness effects, mutagenesis, etc
p0279 A73-31501
Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc
p0345 A73-37398
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972.
p0395 A73-42158
Developments in the analysis of planetary quarantine requirements.
p0395 A73-42159
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis
p0396 A73-42163
Supply, biosynthetic, and regenerated physico-chemical systems for spacecraft life support
[NASA-TT-F-14436] p0604 N73-10155
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Research and development related to space biology and medicine
[JPRS-58010] p0133 N73-16041
Review of papers presented at Conference on Space Biology and Aerospace Medicine
[JPRS-58345] p0176 N73-18125
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Scientific and engineering studies for Physiology of Chimpanzees in Orbit Program
[NASA-CR-131374] p0220 N73-20129
Research activities in exobiology and aerospace medicine
[JPRS-59015] p0262 N73-23024
Microbiological experiments aboard balloons, rockets, and earth satellites - literature review
p0262 N73-23025
USSR conference on exobiology and aerospace medicine
p0264 N73-23045
Low temperature tolerance and adaptation of biological systems to space environment
[JPRS-59129] p0265 N73-23055
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Cryobiological and space biological studies
[JPRS-59129] p0293 N73-24120
Physical and biomedical research by earth orbiting space stations
[AD-756771] p0294 N73-24126
Space biology, space medicine, and human physiology
[NASA-TT-F-14964] p0298 N73-25116
Aerospace medicine and exobiology research in support of long term manned space flight
[JPRS-59702] p0371 N73-29021
Effects of oxygen pressure on tissues under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065
Soviet research on space biology, aerospace medicine, and human factors engineering
[JPRS-59952] p0415 N73-30983
Planetary quarantine requirements for automated spacecraft flights
[NASA-CR-135795] p0445 N73-33040
EXOSKELETONS
Development and evaluation of free flying teleoperators to include semiexoskeletal master control unit, joystick-analog unit, and three dimensional television system
p0261 N73-22925
EXPANDABLE STRUCTURES
NT GAS BAGS
NT INFLATABLE STRUCTURES
EXPANSION WAVES
U ELASTIC WAVES
EXPEDITIONS
Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347
Human factors investigations and acclimatization research conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29348
Investigation of oribatid mites found in Antarctic regions during Tenth Soviet Antarctic Expedition
p0379 N73-29349
Medical analysis of vitamin balance among personnel of Tenth Soviet Antarctic Expedition to show effects on health and acclimatization ability
p0379 N73-29357
Analysis of physiological effects of diet on personnel of Tenth Soviet Antarctic Expedition
p0379 N73-29358
Analysis of microclimate of living and service quarters during Tenth Soviet Antarctic Expedition
p0379 N73-29359
Seasonal plankton collections conducted during Tenth Antarctic Expedition
p0379 N73-29363
EXPERIMENTAL DESIGN
NT FACTORIAL DESIGN
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
Proposed new test for aptitude screening of air traffic controller applicants.

p0155 A73-22535
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays.
p0234 A73-28095
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
Response surface /descriptive function/ methodology design for human performance research, discussing central composite design, observations at experimental points and orthogonal blocking
p0430 A73-44773
Response surface methodology analysis of training transfer in pursuit rotor tracking task, relating three independent variables through multiple-regression prediction equations
p0430 A73-44774
Free electrophoresis space experiment design for weightlessness environments
[NASA-CR-123972] p0101 N73-14090
Criteria for selected response surface methodology design variants in human performance research
[AD-748236] p0102 N73-14099
Biosatellite 2 experiments for determining effects of prolonged weightlessness on biological processes
[CONF-720441-1] p0107 N73-15119
Laboratory investigation of coriolis acceleration effects on vestibular apparatus of cosmonauts
[NASA-TT-F-15129] p0417 N73-30993
EXPERIMENTATION
Skylab experiments to assess weightlessness effects on human nutritional metabolism and musculoskeletal function
p0175 N73-18115
EXPIRATION
Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data
p0577 A73-10169
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781
Control of the duration of expiration.
p0391 A73-41635
EXPIRED AIR
Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Temperature of exhaled air of healthy subjects
p0323 A73-36583
Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
Toxic effects of human exhaled air on mice organisms
p0183 N73-19103
Calcium metabolism determination in rats by measuring argon isotope in exhaled air after neutron irradiation
[NASA-CR-128816] p0186 N73-19130
EXPLODING CONDUCTOR CIRCUITS
U CIRCUITS
EXPLORATION
NT LUNAR EXPLORATION
NT SPACE EXPLORATION
EXPLOSIONS
NT NUCLEAR EXPLOSIONS
Noise and blast environments providing definition of units and techniques of noise measurement and giving booster-launch and spacecraft noise data
p0106 N73-15106
EXPLOSIVE DEVICES
NT INITIATORS (EXPLOSIVES)
EXTINGUISHERS
U FIRE EXTINGUISHERS
EXTRACTION
NT SOLVENT EXTRACTION
EXTRAGALACTIC LIGHT
U EXTRATERRESTRIAL RADIATION
U LIGHT (VISIBLE RADIATION)
EXTRAPOLATION
Dynamic operative image formation and function features during extrapolation tracking of visibly moving target, noting image reaction to operator performance
p0393 A73-41886
EXTRASENSORY PERCEPTION
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555
EXTRASOLAR PLANETS
Extrasolar life in light of stars, planets, and living systems nuclear, gravitational, electromagnetic and weak interactions
p0078 A73-16306
Lifes possible origin on earth from extraterrestrial organisms, discussing galactic intelligent life and intelligent signals from extrasolar planets
p0387 A73-41175
EXTRATERRESTRIAL ENVIRONMENTS
NT JUPITER ATMOSPHERE
NT LUNAR ENVIRONMENT
NT MARS ATMOSPHERE
NT MARS ENVIRONMENT
NT PLANETARY ATMOSPHERES
Extraterrestrial disposal of radioactive waste from thermoelectric propulsion
[NASA-TM-X-62272] p0366 N73-27943
EXTRATERRESTRIAL LIFE
Book - Theory and experiment in exobiology. Volume 2.
p0055 A73-14315
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319
Biological, chemical and cytological methods of microorganism detection integrated into single instrument
p0056 A73-14320
Quarantine necessity, protocol and effectiveness for Mars samples, emphasizing risks of foreign replicating agent introduction to earth biosphere
p0056 A73-14321
Extrasolar life in light of stars, planets, and living systems nuclear, gravitational, electromagnetic and weak interactions
p0078 A73-16306
Space exploration and the origin of life.
p0090 A73-17930
Solvent effects on enzymes - Implications for extraterrestrial life.
p0091 A73-17948

Solar system other planets suitability for terrestrial organisms, noting life forms possible existence on Venus, Mars and Jupiter
p0094 A73-18349
Search for biogenic structures and viable organisms in lunar samples - A review.
p0094 A73-18416
Survival of micro-organisms on the moon.
p0115 A73-19111
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products.
p0202 A73-26479
Chemical evolution before life deduced from carbonaceous meteorites composition, noting porphyrins, optically active substances and isoprenoid hydrocarbons
p0243 A73-30130
Extraterrestrial life existence evidence, discussing biochemical properties, evolution and mental and moral characteristics of extraterrestrial life
p0312 A73-35657
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface
p0312 A73-35804
Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc
p0345 A73-37398
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080
Lifes possible origin on earth from extraterrestrial organisms, discussing galactic intelligent life and intelligent signals from extrasolar planets
p0387 A73-41175
Directed Panspermia theory of terrestrial bioevolution, suggesting microorganism transmission to earth by intelligent technologically advanced civilization via spacecraft
p0428 A73-44553
Extraterrestrial intelligent life existence possibility in terms of hypothesis involving earth as wilderness area or zoo with failure of interaction with other civilization
p0428 A73-44554
Search for biological life forms on Mars and other planets
p0416 N73-30985

EXTRATERRESTRIAL MATTER
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118

EXTRATERRESTRIAL RADIATION
NT PRIMARY COSMIC RAYS
NT SOLAR RADIATION
NT SOLAR WIND
Physical and experimental data obtained by artificial satellites for estimating extraterrestrial radiation hazard in manned space flight
[NASA-TT-F-724] p0173 N73-18098
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107
Space flight ultraviolet irradiation effects on Bacillus thuringiensis toxin production capability
p0291 N73-24109
Phenotype numbers and survival rates of fungi exposed to space environment during Apollo 16 flight
p0292 N73-24110
Ultraviolet space irradiation effects on Aeromonas proteolytica extracellular enzyme production
p0292 N73-24111
Lithium fluoride thermoluminescent dosimeter for measuring ionizing radiation exposure during Apollo 16 flight
p0292 N73-24115

EXTRAVEHICULAR ACTIVITY
Mercury, Gemini and Apollo space suits, discussing glove development, boot design, portable life support equipment and extravehicular mobility
p0289 A73-34025
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Parameters requiring consideration by planners and designers when planning EVA functions for astronauts - Vol. 1
[NASA-CR-128926] p0268 N73-23081
Conceptual designs of versatile EVA work-stations - Vol. 2
[NASA-CR-128927] p0268 N73-23082
Model for estimating impact of manned EVA costs on future payloads - Vol. 3
[NASA-CR-128928] p0268 N73-23083
Regenerable CO2 sorbent formulation and fabrication for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
Equipment requirements for space shuttle EVA/IVA pressure suit, life support system, mobility aids, vehicle support provisions, and emergency support
[NASA-CR-133991] p0414 N73-30089
Guidelines for extravehicular and intravehicular activities during space shuttle operation with emphasis on contingency situations - Vol. 2
[NASA-CR-133992] p0419 N73-31007
Pressure suit requirements and characteristics for space shuttle personnel performing EVA and IVA activities - Vol. 3
[NASA-CR-133993] p0419 N73-31008
Alkali metal carbonate-bicarbonate solid gas reaction for removing CO2 from atmosphere of EVA life support system
[NASA-CR-114661] p0420 N73-31013
Intra- and extravehicular life support space suits for Apollo astronauts
[NASA-CASE-MSC-12609-1] p0439 N73-32012

EYE (ANATOMY)
NT CORNEA
NT FOVEA
NT NYSTAGMUS
NT OCULOMOTOR NERVES
NT PUPILS
NT RETINA
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
Electrical stimulation effects of human eye on photic threshold for square wave vision as function of wavelength, orientation and spatial frequency
p0121 A73-20260
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
Book - Physiology of photoreceptor organs.
p0160 A73-23301
The structural organization of the compound eye in insects.
p0160 A73-23302
Vertebrate photoreceptor cell /rods and cones/ development and structure, discussing light pathway, ciliary connective and microtubules, outer and inner segments, etc.
p0160 A73-23303
The morphological organization of the vertebrate retina.
p0160 A73-23304
Light evoked changes in potential difference between inside and outside of cells in Limulus ommatidia, describing multistage model of generator potential
p0160 A73-23309
Dioptric apparatus of arthropod compound eyes, describing optical characteristics of apposition eye

p0161 A73-23310
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311
Optical properties of vertebrate eyes.
p0161 A73-23312
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520
Two visual systems in the frog.
p0389 A73-41302
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430
Compilation of data concerning effects of infrared radiation on eye
[NASA-CR-128407] p0591 N73-10064
Evoked compensatory reflex reactions of rabbit ocular and eyelid muscles during hypoxia
p0253 N73-21992
Atmospheric effects on laser propagation and impact on eye safety
[AD-755405] p0259 N73-22044
Literature review on human macular pigment absorption and density spectrum of cone receptor
[IZF-1972-17] p0264 N73-23046
Optical modulation transfer functions of human eye for white light
[IZF-1973-2] p0264 N73-23047
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] p0339 N73-27062
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] p0437 N73-32000

EYE DISEASES
NT ASTIGMATISM
NT CATARACTS
NT GLAUCOMA
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
Congenital and acquired color vision defects, discussing color blindness incidence, defect nomenclature and eye tests
p0079 A73-16482
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia
p0275 A73-30999
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system
p0277 A73-31173
Frontal eye-field lesions in monkeys.
p0317 A73-36446
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788

EYE DOMINANCE
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
Eye dominance measurement relationship to image sharpness or visual acuity from binocular and monocular tests, obtaining dominance normal distribution
p0153 A73-21893
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
Amplitude of visual suppression during the control of binocular rivalry.
p0311 A73-35491
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Asymmetry in perception - Attention versus other determinants.
p0435 A73-45338

EYE EXAMINATIONS
Ocular tonus measurements for glaucoma detection in flying personnel, discussing subsequent test procedures in case of abnormal findings
p0586 A73-12158
Visual function as sum of visual acuity and visual field, considering role of resolution and detection tasks in retinal function examinations
p0079 A73-16478
Congenital and acquired color vision defects, discussing color blindness incidence, defect nomenclature and eye tests
p0079 A73-16482
Monocular and binocular clues interaction in depth perception and spatial orientation, discussing stereopsis testing
p0079 A73-16483
Electroretinography /ERG/, electro-oculography /EOG/, visual evoked response /VER/ and electric evoked response /EER/ procedures for electrophysiological investigation of visual system
p0080 A73-16484
Dichromatic convergence points obtained by subtractive colour matching.
p0346 A73-37420
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
Standardization of tests and classification of color perception abnormalities in military personnel
p0179 N73-19071
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] p0335 N73-26072

EYE MOVEMENTS
NT NYSTAGMUS
Extraretinal feedback and visual localization.
p0579 A73-10437
Influence of observing strategies and stimulus variables on watchkeeping performance.
p0580 A73-10771
A combined photoelectric method for detecting eye movements.
p0585 A73-12079
Variability of normal glabellar and supraorbital reflexes in man
p0045 A73-13748
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
Mislocation of visual stimuli during voluntary saccades.
p0084 A73-17174
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
The superior colliculus of the brain.
p0094 A73-18347
Mechanical modeling of eye muscle dynamics.
p0097 A73-18816
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
Two dimensional eye movement recording using a photo-electric matrix method.
p0121 A73-20259
Saccadic suppression for structured background as function of visual image pattern and threshold detection elevation in central nervous system
p0121 A73-20267
Central nervous system stresses effects estimation, discussing ocular positioning movements functional significance and psychological processes
p0128 A73-21542
The nature of the optimum muscular performance achieved in the execution of fast eye rotations.
p0171 A73-24772

Adjustment of saccade characteristics during head movements.
p0201 A73-26222
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093
Monocular fixation tests and prediction model for time course of aftereffect of eye turn on autokinetic illusion direction
p0235 A73-28098
Scalar perceptions with binocular cues of distance.
p0235 A73-28176
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
Eye movements during visual search and memory search.
p0239 A73-29125
Saccadic eye movement control system, investigating response characteristics to variously timed pulse stimuli
p0245 A73-30389
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark.
p0245 A73-30390
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
Voluntary small saccadic eye movements in presence of stationary visible target, considering scanning function of fixation saccades
p0246 A73-30394
Normal fixation of eccentric targets.
p0275 A73-31018
Asymmetry of otolith responses in fish
p0279 A73-31507
Russian book - Methods of studying eye movements.
p0283 A73-32417
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218
Temporal factors of movements in visual aftereffects
p0308 A73-34843
Movement perception during voluntary saccadic eye movements.
p0308 A73-34845
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
Influence of stimulus symmetry on visual scanning patterns.
p0311 A73-35494
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434
Supranuclear connections to oculomotor nuclei in terms of stimulus relation to eye movements
p0316 A73-36435
Pontine reticular formation as origin of neural mechanism generating saccades and nystagmus quick phases in horizontal plane, investigating effects of various brain lesions
p0316 A73-36436
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439
Vestibular and spinal control of eye movements.
p0316 A73-36440
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
Frontal eye-field lesions in monkeys.
p0317 A73-36446
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450
Supranuclear structures regulating binocular eye and head movements.
p0317 A73-36451
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
The control of eye movements in the saccadic system.
p0317 A73-36453
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
Eye movements necessary for continuous perception during stabilization of retinal images.
p0318 A73-36461
Scanning movements in space perception in terms of convergence role during cue conflict and cue isolation experiments
p0318 A73-36462
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463
Involuntary eye movements in the presence and absence of points
p0322 A73-36568
Gaze-positioning eye movement perturbations during somnolence states
p0332 A73-36950
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Human miniature eye movement relationship to visibility and saccades position-correcting reflex function and suppression
p0383 A73-40411
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Visual search, complex backgrounds, mental counters, and eye movements.
p0388 A73-41185
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
Visual perception of relative object dimension during monocular and binocular rod equalization experiment in various visual field restriction conditions, recording eye movements and focusing characteristics
p0394 A73-41890
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959
Signal and noise in the human oculomotor system.
p0407 A73-42964
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on

speed
p0423 A73-43212
Visual evoked potentials to changes in the motion of a patterned field.
p0435 A73-45167
Influence of illumination on electro-oculographic measurements of human eye potential
[AMRU-R-71-1] p0607 N73-11064
Physiological factors in human oculomotor responses to space flight stress
[DR-208-VOL-1] p0109 N73-15136
Anti-compensatory oculomotor response of pilot to rotational head stimuli
p0109 N73-15138
Upper eye lid position effects in electro-oculographic vertical eye movement recordings
p0110 N73-15143
Vestibular stimulation effect in human and animal retinal image stabilization
p0110 N73-15144
Compensatory oculogravic response of eye movement direction during slow head rotation
p0111 N73-15148
Predictive control of human eye tracking movements in response to visual stimuli
p0111 N73-15149
Modelling of random human visual search performance based on physical properties of eye
p0190 N73-19961
Control mechanism in accommodation-vergence eye movement system in human eyes and importance of central and peripheral vision in pattern perception by human beings
p0411 N73-30061
Measurement of control mechanism of accommodation-vergence eye movement system in human eyes using electro-optical measuring instrument
p0411 N73-30062

EYE PROTECTION
Retinal damage thresholds for multiple pulse lasers.
[AD-758530] p0196 A73-25341
Retinal damage from repeated subthreshold exposures using a ruby laser photocoagulator.
p0238 A73-28508
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation
p0356 A73-39205
Transmission characteristics of commercially available, laser eye protectors with Cary 14 spectrophotometer
[AD-746293] p0612 N73-11100
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
IR laser radiation eye protector
[AD-753080] p0178 N73-18142
Optical density properties of ocular glass laser protective filters
[AD-755406] p0261 N73-22057
Performance of hadron laser safety eyeshields in protecting personnel from accidental ocular exposure to common laser radiation
[AD-759921] p0337 N73-26099

F

F-4 AIRCRAFT
Critical skills and procedures isolation within replacement air group /RAG/ training for F-4 pilot performance prediction
p0082 A73-16723
Identifying pilot error potential in the F-4 aircraft.
p0083 A73-16731
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
Minimum quadratic cost optimal control technology for design of F-4C aircraft manual control system
p0601 N73-10137
Development and characteristics of six degree of freedom, fast time predictor model for simulation of F-4 aircraft landing on aircraft carrier
[AD-750294] p0103 N73-14102
Criterion development in replacement air group, using F-4 aircraft
[AD-748195] p0104 N73-14111
Psychometric criteria for pilot performance in F-4 aircraft fleet
[AD-755184] p0269 N73-23087
F-110 AIRCRAFT
U F-4 AIRCRAFT
FABRICS
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532
Bioassay method for thermal protective clothing fabrics evaluation, measuring skin damage with various fabric combinations under exposure to calibrated flame source
p0285 A73-32671
Tests of fabric friction on human skin for aircrew tropical clothing comfort
[RAE-TR-72037] p0604 N73-10157
FABRY-PEROT LASERS
U LASERS
FACE (ANATOMY)
NT NOSE (ANATOMY)
Color photographic system using grid projector and telecentric lenses for recording contours of human face for aircrew oxygen mask fitting
[RAE-TR-71184] p0141 N73-16099
FACTOR ANALYSIS
The information content of successive RR-interval times in the ECG - Preliminary results using factor analysis and frequency analysis.
p0251 A73-30883
Application of factor analysis to the encephalographic characterization of sleep
p0430 A73-44722
FACTORIAL DESIGN
Response surface /descriptive function/ methodology design for human performance research, discussing central composite design, observations at experimental points and orthogonal blocking
p0430 A73-44773
Response surface methodology analysis of training transfer in pursuit rotor tracking task, relating three independent variables through multiple-regression prediction equations
p0430 A73-44774
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775
Prediction equation validity for response surface methodology analysis of surveillance tracking by human operators, comparing variance and regression procedures
p0431 A73-44776
FACTORIES
U INDUSTRIAL PLANTS
FAIL-SAFE SYSTEMS
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482
FAILURE
NT FAILURE ANALYSIS
FAILURE ANALYSIS
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857
Protective helmets performance evaluation for design optimization, considering failure analysis from aircraft accident reports
p0284 A73-32655
FAIRCHILD MILITARY AIRCRAFT
U MILITARY AIRCRAFT
FALLOUT
Atmospheric models for evaluating nuclear facility sites
[SRWL-1651-VOL-2-PT-1] p0446 N73-33044
FARM CROPS
NT CORN
NT GRAINS (FOOD)
NT WHEAT
Use of soil-vegetation system brightness coefficients to measure vegetation quantity and crop yield
p0378 N73-29334
Agroclimatology study of highlands of eastern Africa
[WMO-339] p0446 N73-33045
FAST NEUTRONS
Delta ray particle track structure theory for

radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields
p0196 A73-25423
Relative biological effectiveness of fast neutrons with gamma background
p0215 N73-20091

FATIGUE (BIOLOGY)
NT FLIGHT FATIGUE
NT MUSCULAR FATIGUE
Airline flight and ground personnel fatigue and orthostatic hypotension syndrome manifested by variations in retinal arterial pressure and brain circulation
p0586 A73-12156
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Visual work duration and intensity effects on optic papillae expansions and shape alterations, noting differences between trained and untrained subjects
p0080 A73-16694
Alpha-delta sleep as replacement for delta sleep in various psychiatric patients with chronic fatigue and depression
p0156 A73-22694
Fatigue levels of cerebral hemispheres in response to visual task and test stimuli, noting left hander reduced performance capacity
p0157 A73-22925
Ergonomic endurance limits, physiological strains and fatigue assessment in video coding information task performance as function of work shift time length
p0198 A73-25649
German monograph - Investigation concerning a consideration of the human circadian rhythm by means of a variable working time.
p0240 A73-29283
Gaze-positioning eye movement perturbations during somnolence states
p0332 A73-36950
Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161
Effect of vigilance on performance of simple visual detection task
[AD-745317] p0596 N73-10097
Concepts for reduction of fatigue in sustained tactical operations
[AD-746643] p0611 N73-11090
Fatigue effect on human visual perception
[AD-750097] p0113 N73-15171
Pressure chambers for testing effect of oxygen inspiration on fatigue during flight
[JPRS-59041] p0264 N73-23051
Masking phenomenon for measuring state of fatigue and stress of nervous system
[AD-752975] p0300 N73-25129
Subjective and physiological indicators of fatigue and performance during vigilance task
[AD-761503] p0413 N73-30077
Effects of fatigue, age, and degree of difficulty on eye-hand coordination performance
p0446 N73-33051

FATTY ACIDS
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Exogenous free fatty acid effects on hypoxic myocardial function in isolated isometric rat papillary muscles
p0241 A73-29572
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease
p0405 A73-42837
Biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068
Gas chromatography-mass spectrometry for analyzing fatty acid and sterol concentrations in plant tissue samples
[NASA-CR-128740] p0186 N73-19131
Ultracentrifugation of biological materials
[NASA-CR-114673] p0438 N73-32009

FEASIBILITY ANALYSIS
Analysis of pressure waves as a mean of diagnosing vascular obstructions.
p0346 A73-37524
Feasibility of effective exercise and health evaluation and enhancement program for NASA employees
p0147 N73-17091
Feasibility of limb controlled astronaut maneuvering scheme
p0339 N73-27063

FECES
Toxicity of gaseous urine and feces emissions on rat organism
p0182 N73-19097
Hydroponic cultivation of plants on clay filters from human mineralized feces
p0184 N73-19110

FEDERAL REPUBLIC OF GERMANY
U GERMANY

FEEDBACK
NT SENSORY FEEDBACK
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162

FEEDBACK CIRCUITS
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization.
p0287 A73-33161

FEEDBACK CONTROL
Need for within-trial feedback as a function of task similarity in adaptive training of manual control.
p0081 A73-16709
Book - Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110
Phase margin measure for determining human operator control performance in multivariable closed loop system
p0601 N73-10135
Threshold circuits with feedback channels for cardiac R-wave detection in electrocardiographic heart rate monitoring
[NASA-TN-D-7152] p0112 N73-15158
Remotely controlled manipulators with independent follow-up and force reproduction mechanisms
p0336 N73-26082
Adaptive modeling technique for synthesizing controllers to provide corrective dynamics to operator mathematical model in closed loop control system
[NASA-CR-132294] p0377 N73-29060

FEEL
U SENSORY FEEDBACK

FEMALES
Human factors engineering to determine maximum control forces capability of female pilots
[FAA-AM-72-27] p0112 N73-15157

Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
FERMENTATION
Biodegradation of cellulose fibers and reclamation of single cell protein from refuse through fermentation process
[NASA-CR-130300] p0106 N73-15115
FERMIONS
NT FAST NEUTRONS
FERRIC IONS
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
FET (TRANSISTORS)
U FIELD EFFECT TRANSISTORS
FETUSES
Cardiac output and oxygen transport in early ontogenesis
p0084 A73-16738
FEVER
Fever generation in rabbits by intravenous injection of table salt
[NASA-TT-F-14677] p0136 N73-16063
FIBERS
NT HAIR
FIBRIN
Fibrinolytic activity of urine in healthy persons
p0276 A73-31165
FIBRINOGEN
Emotional overstress effects on the indices of the blood coagulation system in monkeys
p0249 A73-30846
Effect of fibrinogen concentration on viscosity of human blood
[DLR-FB-73-54] p0446 N73-33046
FIBROBLASTS
NT COLLAGENS
FIELD EFFECT TRANSISTORS
Modification and updating of the bioelectric DS2C amplifier for a FET input.
p0159 A73-22936
FIELD STRENGTH
NT ELECTRIC FIELD STRENGTH
FIGHTER AIRCRAFT
NT F-4 AIRCRAFT
FILTERING
U FILTRATION
FILTRATION
NT SPATIAL FILTERING
Hyperfiltration technique applied to wash water reclamation at elevated temperatures.
[ASME PAPER 73-ENAS-27] p0350 A73-37982
FINE STRUCTURE
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships
p0197 A73-25590
FINES
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias obtained by vacuum pyrolysis, acid hydrolysis and crushing
p0095 A73-18418
FINGER LAKES
U LAKES
FINGERS
Fingerprint patterns incidence relation in congenital vitium cordis patients, using Henry dactyloscopic classification
p0581 A73-11080
A device for the continuous measurement of subjective changes
p0285 A73-33090
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
FINITE ELEMENT METHOD
Finite element displacement analysis of a lung.
p0056 A73-14661
FIRE CONTROL CIRCUITS
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
FIRE DAMAGE
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532
FIRE EXTINGUISHERS
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0155 A73-22537
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons
[AGARD-R-599] p0149 N73-17106
FIRE FIGHTING
Space technology utilization for firefighters breathing equipment development, discussing design and field testing program
[ASME PAPER 73-ENAS-24] p0350 A73-37980
FIRE PREVENTION
Habitable atmospheres which do not support combustion.
p0162 A73-23562
Russian book - safety measures in aviation industry.
p0312 A73-35869
Fire hazard reduction in corporate aircraft oxygen system, covering hoses, regulators, manifolds, cylinders, leakage, combustion conditions and servicing procedures
p0357 A73-39215
FISH
U FISHES
FISHES
Effect of sonic boom on fish and fish eggs during developmental stage
[FAA-RD-73-29] p0219 N73-20121
Blind fish responses to gravitational changes as in parabolic flight
p0226 N73-21101
Asymmetry of fish otolithic receptor functions and vestibular disturbances during space flight
p0262 N73-23031
FISHTAILING
U YAW
FITNESS
NT FLIGHT FITNESS
NT PHYSICAL FITNESS
FIXED WINGS
Effectiveness of synthetic fixed wing flight training equipment for military purposes
[AD-744447] p0604 N73-10158
FIXED-WING AIRCRAFT
U FIXED WINGS
FLAME INTERACTION
U CHEMICAL REACTIONS
FLAMMABILITY
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429
FLAP CONTROL
U AIRCRAFT CONTROL
FLASH
Dynamic properties of vision. III - Twin flashes, single flashes and flickerfusion.
p0120 A73-20253
FLASH BLINDNESS
Flashblindness recovery following exposure to constant energy adaptive flashes.
p0238 A73-28505
Response time of flash blindness recovery in human exposure to constant energy flashes
[AD-747631] p0071 N73-13095
FLASH LAMPS
Bloch law error in visual perception of capacitor discharge brightness
[AD-749452] p0104 N73-14109
FLASH TUBES
U FLASH LAMPS
FLEXORS
EMG measurement on male adults for muscular relaxation reaction time interval from light stimulus onset to elbow flexor response
p0045 A73-13699
FLICKER
Mathematical description of some visual inertia effects
p0060 A73-15786
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli
p0096 A73-18624
FLICKER FUSION FREQUENCY
U CRITICAL FLICKER FUSION

FLIGHT ALTITUDE
Effects of oxygen pressure on tissues under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065
FLIGHT CLOTHING
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990
Tests of fabric friction on human skin for aircrew tropical clothing comfort
[RAE-TR-72037] p0604 N73-10157
FLIGHT CONDITIONS
Functional state alteration of the visual analysor in pilots
p0093 A73-18257
Some characteristics of pilot's performance under complicated flight conditions.
p0328 A73-36921
FLIGHT CONTROL
NT AUTOMATIC FLIGHT CONTROL
Manual flight control and emergency procedure task skill degradation
[NASA-CR-128612] p0603 N73-10153
Oculogravic illusion factor in theoretical model of pilot control loss in jet aircraft
p0110 N73-15142
Measurements of acceleration stress effects on pilot maneuvering ability and flight control performance
[AMRL-TR-72-3] p0189 N73-19154
Human factors engineering for flight control/display system with on-line terminal
[AD-754916] p0223 N73-20148
FLIGHT CREWS
Fatigue in flight personnel during long flights
p0585 A73-12153
Psychological and medical viewpoint for hijacker handling, discussing air crew training program
[AD-757130] p0589 A73-12564
Radiation problems of supersonic flight - The operators' viewpoint.
p0080 A73-16624
Renal lithiasis among civil operating aircrew
p0127 A73-21536
Renal lithiasis among military operating aircrew
p0128 A73-21537
Proteinuria and civil aviation aircrew
p0128 A73-21538
Proteinuria and military aircrew
p0128 A73-21539
Pilot incapacitation as cause for aircraft operational risks, discussing flight crews education for emergency situations handling
p0170 A73-24717
Neurological fatique-indices of flight crews of long-range and military transport aviation
p0193 A73-25040
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen.
p0238 A73-28511
A comparison and analysis of head sizes of Navy aircrew to the standard anthropometric data.
p0284 A73-32656
U-2 and SR-71 aircrews physiological training for high altitude and supersonic flight hazards, discussing pressure suits, ejection seats, parachutes and survival and life support equipment
p0284 A73-32657
Ventilated wet suit for naval aircrews protection against water exposure in aircraft accidents, describing neoprene foam and nylon liner construction with air ventilation
p0285 A73-32672
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
Physical energy expenditure in long-haul cabin crew.
p0326 A73-36793
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925
Current aspects of the cochlear function in members of flight crews
p0330 A73-36940
Digestive hemmorhages in aircrew - Individual and collective safety
p0332 A73-36952
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196
Sleep loss in air cabin crew.
p0355 A73-39109
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Developments as regards maximum visual acuity with age among cockpit crew members.
p0387 A73-41164
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure.
p0425 A73-43500
Method for calculating aircrew radiation dosage near atmospheric nuclear weapon detonation
[AD-745084] p0593 N73-10079
Statistical analysis of occurrence of backache among Royal Air Force flight crews and ground crews to show effects of crew seats on physical comfort
[AD-745177] p0597 N73-10102
Test evaluation of laser protective visors for flight crews
[AD-751470] p0142 N73-16102
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101
Influence of cockpit noise on hearing in flight crew personnel
[FAA-AM-72-32] p0185 N73-19125
Combined heat, noise, and vibration effects on aircrew performance
[AMRL-TR-71-113] p0188 N73-19146
Effect of briefing information on target acquisition performance of observer
p0191 N73-19972
US civil airmen statistics
[AD-754271] p0223 N73-20153
Physiological aspects of sleep induction in aircrews after prolonged flight times
p0227 N73-21108
Effect of cigarette smoking on sensory perception and performance parameters of flight crews
[AD-754421] p0267 N73-23071
Color vision standards for flying military aircrews
[FPRC/1319] p0366 N73-27942
Analysis of US Navy aviation combat casualty experiences in Southeast Asia to determine effectiveness of rescue and recovery operations under combat conditions
[AD-761636] p0370 N73-27972
FLIGHT FATIGUE
Fatique in flight personnel during long flights
p0585 A73-12153
Neurological fatique-indices of flight crews of long-range and military transport aviation
p0193 A73-25040
The effects of fatique on health and flight safety.
p0303 A73-34080
Lone woman pilot sleep patterns and sleep disruptions on global flight across time zones
p0307 A73-34745
Physiological stresses and medical criteria for aircrew fatique
p0111 N73-15152
FLIGHT FITNESS
Carpentier reconstructive valvuloplasty technique of mitral valve insertion from viewpoint of pilots return to flying duties
p0586 A73-12157
Renal lithiasis among military operating aircrew
p0128 A73-21537
Proteinuria and military aircrew
p0128 A73-21539
Antidiabetic medications and aircrew
p0128 A73-21541
USAF WAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system
p0155 A73-22539
The role of vestibulometry in medical evaluation of flight personnel
p0165 A73-23821
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants

p0209 A73-27717
Naval aviator training program dropouts identification in terms of physiological, safety, security, social, self-esteem and self-actualization needs
p0247 A73-30513
Detection of atherosclerosis in examinations of flight personnel
p0328 A73-36913
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914
Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129
Evaluation of the physical conditions of individual airmen
p0425 A73-43790
Conference on detection, evaluation, and identification of drugs and alcohol in flying personnel and effects on flight fitness
[AGARD-CP-108] p0226 N73-21102
Diagnostic physiological tests for selection and training of flying personnel
[NASA-TT-F-687] p0252 N73-21981
Oxygen breathing effects on human blood circulation and flight personnel fitness test
p0253 N73-21993
Conditioned reflex motion sickness test of statokinetic fitness for flying personnel
p0254 N73-21994
Barany chair rotation for acceleration tolerance testing on flying personnel
p0254 N73-21995
Diurnal cardiac rhythm fluctuation for cardiovascular evaluation of flight personnel
p0254 N73-21997
Age limits and flight fitness of civil aviation pilots
p0254 N73-21999
Middle ear barotrauma effect on work capacity and flight fitness of flying personnel
p0254 N73-22000
Syringomyelia in central nervous system affecting flying fitness
p0266 N73-23061

FLIGHT HAZARDS
Prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance.
[DFVLR-SONDDR-268] p0050 A73-14158
U-2 and SR-71 aircrews physiological training for high altitude and supersonic flight hazards, discussing pressure suits, ejection seats, parachutes and survival and life support equipment
p0284 A73-32657
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180

FLIGHT INSTRUMENTS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
Analysis of pilot performance in evaluating three types of aircraft altimeters during C-135B simulator flight
[ASD-TR-72-63] p0074 N73-13117

FLIGHT PATHS
Migration corridors for ducks and geese and effects on aviation safety
[AD-748114] p0073 N73-13109

FLIGHT RECORDERS
Pilot error evaluation in aircraft accidents, discussing human failure factors and flight and cockpit voice recorder evidence
p0307 A73-34748

FLIGHT RULES
NT VISUAL FLIGHT RULES

FLIGHT SAFETY
Aviation medicine assessment of environment effects on pilot responsiveness, task performance and flight safety predictability, considering temperature, oxygen, gravity, acceleration, pressure and stress effects
p0193 A73-25039
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel

p0303 A73-34078
The effects of fatigue on health and flight safety.
p0303 A73-34080
General aviation pilot operational profile study, discussing implications for airman certification standards, flight safety regulations and aircraft design
[SAE PAPER 730334] p0307 A73-34687
Hypoglycemia in airline pilots.
p0326 A73-36790
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines.
p0329 A73-36922
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112
Safe flying, skilled personnel and aircraft maintenance assurance via safety equipment, initial and recurrent training, protective clothing and shelter from inclement weather, maintenance scheduling, etc
p0357 A73-39212
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
Helicopter flying in poor light and featureless terrain and color vision abnormality
p0180 N73-19075
Analysis of aircraft pilot capability to visually detect other aircraft in air to air situation as collision avoidance feasibility
[FAA-RD-73-40] p0231 N73-21145
Performance tests to determine capability of aircraft pilots to avoid midair collisions based on visual perception of target and information from pilot warning indicator
p0231 N73-21146
Photographic recording of aircraft in near midair collision conditions to determine feasibility of collision avoidance based on visual perception of pilot
[CDC-JL-5] p0231 N73-21147
Analysis of flight tests to determine range of visual detection of aircraft as basis for visual perception to avoid midair collisions
p0231 N73-21148

FLIGHT SIMULATION
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Visual image generation as textured flight information resembling retinal images for airborne flight simulation
p0600 N73-10128
Biaxial simulator imposing standardized coriolis stimuli for selection, test, and rehabilitation of motion sick pilots
p0225 N73-21098
Pilot performance under simulated conditions of modified aircraft control dynamics, navigational task complexity, and induced stress
[AD-764760] p0441 N73-32025

FLIGHT SIMULATORS
Ambient temperature rise effects on pilot performance in a flight simulator
p0331 A73-36948
Effectiveness of synthetic fixed wing flight training equipment for military purposes
[AD-744447] p0604 N73-10158
Analysis of pilot performance in evaluating three types of aircraft altimeters during C-135B simulator flight
[ASD-TR-72-63] p0074 N73-13117
Motion effects in pilot reactions to ground-based flight simulator display evaluation
[AD-749370] p0075 N73-13126
Validity of ground training for developing flying skill during pilot training
[AD-749621] p0113 N73-15168
Operational effectiveness of jet flight training simulator
[AD-750248] p0113 N73-15170
Pilot performance during simulated standard instrument procedure turn with and without predictor display

[NASA-TM-X-62201] p0150 N73-17118
Physiological stress reactions in simulated flight for pilot selection and training p0254 N73-22001
Changes in diurnal variations of pilot performance in flight simulator compared with performance after transatlantic flights
[DLR-FB-73-25] p0298 N73-25122
Pilot ground training proficiency of flight simulators
[AD-755681] p0341 N73-27081

FLIGHT STRESS
Effect of hydrochlorothiazide on +Gz tolerance in normotensives. p0050 A73-14159
Aviation medicine assessment of environment effects on pilot responsiveness, task performance and flight safety predictability, considering temperature, oxygen, gravity, acceleration, pressure and stress effects p0193 A73-25039
Further sleep problems in airline pilots on world-wide schedules. p0326 A73-36792
Physiologic cost of prolonged double-crew flights in C-5 aircraft. p0386 A73-41152

FLIGHT STRESS (BIOLOGY)
NT SPACE FLIGHT STRESS
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151
Fatique in flight personnel during long flights p0585 A73-12153
Aerodynamic pumping-caused spinal fractures in two pilots during high speed flight p0586 A73-12154
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions p0087 A73-17689
The biodynamic aspects of low altitude, high speed flight. p0096 A73-18471
Russian book - Tissue, oxygen in the presence of extremal flight factors. p0116 A73-19425
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens p0235 A73-28283
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses. p0238 A73-28509
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases. p0247 A73-30515
Military aircraft pilot in-flight consciousness loss etiologies, discussing rapid decompression, hypoxia, dysbarism, seizure, improper maneuver, vasovagal syncope, acceleration sensitivity, etc p0307 A73-34747
The role of the sympathetic section of the vegetative nervous system in the training of the organism for the influence of statokinetic irritants. p0327 A73-36903
Study of Indian naval aircrew experiences and psychic factors in disorientation. p0328 A73-36919
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights p0343 A73-37196
Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence p0343 A73-37197
Pilot workload immediate, duty day and long term period evaluation from heart rate, subjective, psychological, biochemical stress and sleep pattern measurements p0347 A73-37734
Physiological cost in 36- and 48-hour simulated flights. p0355 A73-39101
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
Stress and strain in student helicopter pilots. p0386 A73-41155
Individual personality variability difficulties in measurement of human psychophysiological reactions to flight stress, emphasizing psychological interview and evaluation methods p0408 A73-43130
Analysis of acceleration forces produced during aerobatic flight and effects of acceleration forces on human body
[FAA-AM-72-28] p0609 N73-11075
Flight stress effects on cardiovascular reactions of pilots with atherosclerosis p0064 N73-12090
Conference on operational flight stress effects on human biodynamics and performance
[AGARD-CP-101] p0188 N73-19143
Flight test program to study human factors problems and flight crew performance in military aircraft p0188 N73-19145
Combined heat, noise, and vibration effects on aircrew performance
[AMRL-TR-71-113] p0188 N73-19146
Measures to determine psychophysiological reactions of military flight crews to flying stress p0188 N73-19148
Human stress expenditures in operational airlift mission flights p0189 N73-19151
Influence of long duration flight missions on metabolic and endocrine functions of pilots and navigators p0189 N73-19152
Systems analysis of physiological performance related to stresses such as those experienced in high performance aircraft
[AD-754970] p0230 N73-21133
Physiological responses of flying personnel to multiple stresses
[AD-759565] p0341 N73-27082
Experimental research in underwater medicine, flight stress, and pilot selection
[DLR-FB-73-15] p0367 N73-27951
Inflight heart and respiratory rate recording of pilots, using nose clip transducers p0367 N73-27953
Diagnosis and prognosis of pilot reaction and tolerance to psychical stress p0368 N73-27962
Preflight and flight stress analysis, its relation to circadian rhythms measured in pilot physiological parameters
[DLR-FB-72-39] p0412 N73-30071
Human circadian rhythms of blood circulation, respiration and catabolism under flight simulation stress
[DLR-FB-72-49] p0413 N73-30073

FLIGHT SURGEONS
Medical diagnosis of pilot performance disturbances from viewpoint of flight surgeon responsibilities p0277 A73-31171

FLIGHT TESTS
Functional state alteration of the visual analyzer in pilots p0093 A73-18257
Flight test program to study human factors problems and flight crew performance in military aircraft p0188 N73-19145

FLIGHT TIME
Physical energy expenditure in long-haul cabin crew. p0326 A73-36793
Human psychomotor performance circadian rhythm variations after transmeridian flight noting time shift effect
[DLR-FB-73-52] p0421 N73-31022

FLIGHT TRAINING
Flight personnel training meetings, covering decision making, cockpit personnel selection and instructor role analysis p0041 A73-13073

Performance measurement system for combat crew flight training in complex aircraft weapon systems, identifying training research goals p0083 A73-16726
The isolation of critical elements within selected maneuvers during primary flight training. p0083 A73-16727
U-2 and SR-71 aircrews physiological training for high altitude and supersonic flight hazards, discussing pressure suits, ejection seats, parachutes and survival and life support equipment p0284 A73-32657
Objectives of training in relation to accident prevention. p0326 A73-36850
Stress and strain in student helicopter pilots. p0386 A73-41155
Validity of ground training for developing flying skill during pilot training [AD-749621] p0113 N73-15168
Operational effectiveness of jet flight training simulator [AD-750248] p0113 N73-15170
Evaluation of standardized angle of attack flight training system [AD-757243] p0269 N73-23090
Automative adaptive flight training, using instrument flight maneuvers [AD-759366] p0341 N73-27080

FLOATS
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658

FLORA
U PLANTS (BOTANY)

FLOTATION SYSTEMS
U FLOATS

FLOW CHARACTERISTICS
NT FLOW DISTRIBUTION
NT FLOW VELOCITY

FLOW DISTRIBUTION
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories. p0403 A73-42678
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches p0408 A73-43103

FLOW EQUATIONS
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles p0042 A73-13302

FLOW FIELDS
U FLOW DISTRIBUTION

FLOW MEASUREMENT
Telemetric measurement of local blood flow by heat conduction probes. p0052 A73-14282
Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing p0053 A73-14286
Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature p0053 A73-14288
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem. p0061 A73-15992
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute p0126 A73-21325
Recent measurements of flow using nuclear magnetic resonance techniques. p0171 A73-24855
Techniques for studying the aerodynamic characteristics of the bronchial tree of man p0322 A73-36576
Measurement of coronary blood flow by radiocardiography - Study of 116 cases. p0405 A73-42838

FLOW PATTERNS
U FLOW DISTRIBUTION

FLOW RATE
U FLOW VELOCITY

FLOW RESISTANCE
NT AERODYNAMIC DRAG
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium p0408 A73-43105

FLOW VELOCITY
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles p0042 A73-13302
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity. p0085 A73-17274
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter. p0159 A73-23173
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions. p0383 A73-40408

FLOW VISUALIZATION
Pattern of blood flow within the heart - A stable system. p0125 A73-21214
Operator visual perception mapping during parameter adjustment in dynamic control system p0600 N73-10129
Semicircular canal model with flow visualization chamber for dynamic recording of canal fluid response to angular velocity effects p0111 N73-15153

FLOWMETERS
NT RHEOMETERS
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt. p0503 A73-11505
Blood flow and pressure and ECG data acquisition and transmission via radio telemetry system with electromagnetic flowmeter p0052 A73-14283
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter. p0159 A73-23173
A simplified method for the in vitro calibration of electromagnetic flowmeters. p0205 A73-27027
Comparison of plethysmographic and electromagnetic flow measurements. p0427 A73-44215
Thermal flowmeter for urine volume measurement in manned space flight environment [NASA-CR-128726] p0141 N73-16095
Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time [NASA-CASE-MSC-13436-1] p0439 N73-32015

FLUCTUATION
U VARIATIONS

FLUID DYNAMICS
NT GAS DYNAMICS
Fluid dynamic aspects of cardiovascular behavior during low frequency whole-body vibration such as encountered by astronauts during launch and reentry [NASA-CR-133843] p0412 N73-30069

FLUID FILTERS
NT AIR FILTERS
Design and fabrication of prototype particulate regenerative filter with backflush for spacecraft fluid system [NASA-CR-115505] p0268 N73-23084
Bactericidal properties of sorbents in spacecraft water regeneration system p0374 N73-29038

FLUID FLOW
NT AIR FLOW
NT BLOOD FLOW
NT CAPILLARY FLOW
NT NONNEWTONIAN FLOW
NT PIPE FLOW
NT PROPELLANT TRANSFER
NT STEADY FLOW
NT UNSTEADY FLOW
NT VISCOUS FLOW
NT WATER FLOW

Semicircular canal model with flow visualization chamber for dynamic recording of canal fluid response to angular velocity effects p0111 N73-15153
FLUID MECHANICS
NT FLUID DYNAMICS
NT GAS DYNAMICS
Endolymph fluid mechanics in semicircular canals approximated by rigid torus filled with incompressible Newtonian fluid p0315 A73-36430
FLUORESCENCE
NT X RAY FLUORESCENCE
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hoek p0124 A73-21135
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae. p0287 A73-33226
Photometric observations of in situ fluorescence and bioluminescence with Biota in New York Bight [RM-568J] p0252 N73-21978
Marine luminescence data for monitoring algal and pollutant concentrations [NASA-CR-114578] p0297 N73-25114
Fluorometric 11-hydroxycorticosteroid determination in human blood plasma [NASA-TT-F-15092] p0416 N73-30990
FLUORESCENT EMISSION
U FLUORESCENCE
FLUORIDES
NT CHLORINE FLUORIDES
NT HYDROFLUORIC ACID
NT LITHIUM FLUORIDES
FLUORINE COMPOUNDS
NT CARBON TETRAFLUORIDE
NT CHLORINE FLUORIDES
NT FLUOROCARBONS
NT FLUOROHYDROCARBONS
NT HYDROFLUORIC ACID
NT LITHIUM FLUORIDES
FLUORINE ORGANIC COMPOUNDS
NT CARBON TETRAFLUORIDE
NT FLUOROCARBONS
NT FLUOROHYDROCARBONS
FLUORO COMPOUNDS
NT CARBON TETRAFLUORIDE
NT FLUOROCARBONS
NT FLUOROHYDROCARBONS
FLUOROCARBONS
Toxicology of some commercial fluorocarbons [AD-751429] p0138 N73-16079
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons [AGARD-R-599] p0149 N73-17106
FLUOROHYDROCARBONS
NT CARBON TETRAFLUORIDE
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions. p0155 A73-22537
Sensory receptors irritation and cardiopulmonary toxicity from fluorocarbon propellants [AD-751426] p0140 N73-16089
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications [AD-751425] p0140 N73-16090
Cardiovascular effects of fluorocarbon exposure, emphasizing epinephrine sensitivity [AD-751427] p0140 N73-16091
FLUOROSCOPY
Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation p0389 A73-41216
Self-scanning chromatographic-fluorographic drug detector with optical readout system [NASA-CASE-ARC-10633-1] p0259 N73-22048
FLUX DENSITY
NT ILLUMINANCE
NT IRRADIANCE
NT LUMINANCE
NT LUMINOUS INTENSITY
NT RADIANCE
NT RADIANT FLUX DENSITY
NT SOUND INTENSITY
FLUX MAPPING
U MAPPING
FLUXMETERS
U MEASURING INSTRUMENTS
FLYING PERSONNEL
NT AIRCRAFT PILOTS
NT ASTRONAUTS
NT COSMONAUTS
NT FLIGHT CREWS
NT PILOTS (PERSONNEL)
NT SPACECREWS
NT TEST PILOTS
Thoracic X ray photography technique for tubercular lesion detection in flight personnel, comparing to standard radiography and radioscopy p0586 A73-12155
Ocular tonus measurements for glaucoma detection in flying personnel, discussing subsequent test procedures in case of abnormal findings p0586 A73-12158
Flight personnel training meetings, covering decision making, cockpit personnel selection and instructor role analysis p0041 A73-13073
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel. [AD-754147] p0050 A73-14164
Performance measurement system for combat crew flight training in complex aircraft weapon systems, identifying training research goals p0083 A73-16726
Human factor role in flying personnel errors, noting man machine system performance and medical service engagement p0094 A73-18258
USAF WAVR file of epidemiologic data on medically waivered flying personnel, describing computerized updating system p0155 A73-22539
The role of vestibulometry in medical evaluation of flight personnel p0165 A73-23821
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses. p0238 A73-28509
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers p0248 A73-30519
Responsibility for ischemic cardiopathies in civil aviation flight personnel p0327 A73-36902
Detection of atherosclerosis in examinations of flight personnel p0328 A73-36913
Psychotechnical selection of flight crews in South Vietnam p0328 A73-36918
Visual problems among senior flight personnel. p0329 A73-36924
Glaucoma development in aging flight personnel. p0329 A73-36926
Binocular vision variation with age in flight crews p0329 A73-36928
Information yield of the Annual Medical Examination for Flying. p0356 A73-39110
Evaluation of the physical conditions of individual airmen p0425 A73-43790
Motion sickness effects on flying personnel performance during hurricane penetrations [AD-743928] p0596 N73-10100
Anthropometric survey of US army aviators conducted in 1970 [AD-743528] p0605 N73-10162
Physiological stresses and medical criteria for aircrew fatigue p0111 N73-15152
Color vision requirements for flying personnel of various armed forces - conferences [AGARD-CP-99] p0179 N73-19065
Color vision testing and selection procedures for flying personnel since World War 1 p0179 N73-19069
Color vision tests as predictive indicators of flying task performance

p0180 N73-19074
Color vision requirements for air crew personnel of future, including coding evaluation
[AMRL-TR-71-116] p0180 N73-19076
Use of photostimulation in electroencephalographic tests of flying personnel and candidates at flight schools
p0218 N73-20111
Conference on detection, evaluation, and identification of drugs and alcohol in flying personnel and effects on flight fitness
[AGARD-CP-108] p0226 N73-21102
Drug therapy effects on flying effectiveness and psychosomatic fitness of flying personnel
p0226 N73-21103
Drug screening data for civil aviation personnel obtained by urinalyses
p0226 N73-21104
Chemotherapy for air crews in Great Britain
p0226 N73-21105
Suitability of insulin dependent and oral drug dependent diabetics as navigation personnel
p0228 N73-21120
Opthalmological examination of antimalarial drugs effects on performance of navigation personnel
p0228 N73-21122
Flight safety factors in prescribing tranquilizing drugs for flying personnel
p0228 N73-21123
Diagnostic physiological tests for selection and training of flying personnel
[NASA-TT-F-687] p0252 N73-21981
Myocardial changes in flying personnel exposed to hypoxic hypoxia
p0253 N73-21985
Human arterial elasticity during breathing of reduced partial oxygen atmosphere
p0253 N73-21987
Latent coronary insufficiency detection in flying personnel using barochamber loading
p0253 N73-21988
Changes in vectorcardiograms of atherosclerotic flying personnel after glucose testing
p0253 N73-21989
Speech and tone audiometry for testing auditory acuity of flying personnel
p0253 N73-21990
Arterial hypertension symptoms in flying personnel
p0253 N73-21991
Oxygen breathing effects on human blood circulation and flight personnel fitness test
p0253 N73-21993
Conditioned reflex motion sickness test of statokinetic fitness for flying personnel
p0254 N73-21994
Barany chair rotation for acceleration tolerance testing on flying personnel
p0254 N73-21995
Diurnal cardiac rhythm fluctuation for cardiovascular evaluation of flight personnel
p0254 N73-21997
Middle ear barotrauma effect on work capacity and flight fitness of flying personnel
p0254 N73-22000
Physiological stress effects of space flight on human body
[JPRS-57139] p0254 N73-22002
Commutation of coriolis forces in selecting flying personnel for vestibular tolerance
p0263 N73-23042
Physiological responses of flying personnel to multiple stresses
[AD-759565] p0341 N73-27082
Psychophysiological aspects in flight personnel visual perception of image indicator
p0373 N73-29035

FLYING PLATFORM STABILITY
U AERODYNAMIC STABILITY

FOAMS
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429

FOETUSES
U FETUSES

FOOD
Microbiological inspections of NASA food handling facilities
[NASA-TM-X-64734] p0220 N73-20127
Storage stability of intermediate moisture foods for space shuttle
[NASA-CR-133978] p0366 N73-27944
Food heating tests in different atmospheres
[NASA-CR-134040] p0419 N73-31012

FOOD INTAKE
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
Resistance of soil microorganisms to starvation.
p0589 A73-12627
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs
p0050 A73-14168
Organ and body mass changes in restrained and fasted domestic fowl.
p0057 A73-14975
Effect of hypergravity on the circadian rhythms of white rats.
[ASME PAPER 72-WA/BHF-14] p0061 A73-15877
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Thermal factor and dehydration influences on protidic and lipidic catabolisms of young men with partial food deprivation in hot climate, discussing metabolic balances
p0125 A73-21248
Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528
Biopotential alpha and theta rhythms of neocortex and hippocampus of milk drinking cats after food and water deprivation
p0157 A73-22862
Nutrition systems for pressure suits.
p0355 A73-39105
Chromatographic determination of gaseous metabolites released by man during reduced food intake
p0064 N73-12091
Analysis of nutrient intake and absorption during Apollo 16 flight
[NASA-TM-X-58096] p0067 N73-12110
Functional relationship between food preference and frequency of repetitious eating
[AD-749079] p0102 N73-14100
Food consumption and morphological indices of blood in white mice with replacement of air nitrogen by inert gases in pressurized chamber
p0442 N73-33020
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063

FORCE DISTRIBUTION
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106

FOREARM
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657

FORECASTING
NT PERFORMANCE PREDICTION
NT PREDICTION ANALYSIS TECHNIQUES
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861

FORECASTS
U FORECASTING

FOREST FIRE DAMAGE
U FIRE DAMAGE

FORESTS
Biometric and radiant transfer characteristics of forest vegetation
p0378 N73-29328

Radiation regime of forest vegetation under plant cover and open areas under various weather conditions
p0378 N73-29329
Light effects on organic matter balance of oak underwood growing in forest understory
p0378 N73-29330
FORM PERCEPTION
U SPACE PERCEPTION
FORMALDEHYDE
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Formaldehyde gas as a sterilant.
p0288 A73-33694
New formaldehyde base disinfectants.
p0424 A73-43276
FORMAT
Space shuttle orbiter subsystems, formats and format trees, and coding of sample format - Vol. 3 [NASA-CR-128578]
p0603 N73-10147
FOSSIL METEORITE CRATERS
U FOSSILS
FOSSILS
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723
FOURIER ANALYSIS
NT FOURIER SERIES
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Serial segments method for measuring pilot manual control remnant in vicinity of sine waves
p0601 N73-10136
FOURIER SERIES
Operator remnant power spectral density measurement during compensatory tracking task by serial segments method, noting Fourier coefficient processing
p0578 A73-10324
FOURIER TRANSFORMATION
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition
p0393 A73-41816
Computerized fast Fourier transform technique for measuring human performance in compensatory tracking task
[AD-748659]
p0100 N73-14078
FOVEA
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Test field surround effects on onset and offset reaction time to foveal stimulation
p0044 A73-13558
Study of variations of retinal disparities around the fixation point by the binocular vernier method in the foveal region
p0046 A73-13763
Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli
p0120 A73-20257
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396
Foveal threshold additivity measurements for monochromatic and mixed light, using grating resolution as brightness criterion
p0246 A73-30398
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242
Eigenvectors of the sensitivity variations across the human central fovea.
p0407 A73-42957
FRANCE
Color aptitude of dyschromatopsia French navigators and pilots
p0179 N73-19068
FREE FALL
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments
p0397 A73-42172
FREE RADICALS
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
Nitroxide free radicals as spin labels in biochemical systems
[NASA-TT-F-14866]
p0220 N73-20125
FREEZE DRYING
Production methods for preventing deterioration of freeze-dried foods
[NASA-CR-128915]
p0269 N73-23085
FREON
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications
[AD-751425]
p0140 N73-16090
FREQUENCIES
NT AUDIO FREQUENCIES
NT BEAT FREQUENCIES
NT INFRASONIC FREQUENCIES
NT LOW FREQUENCIES
NT LOW FREQUENCY BANDS
NT MICROWAVE FREQUENCIES
NT RADIO FREQUENCIES
NT RESONANT FREQUENCIES
FREQUENCY ANALYZERS
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
Application of frequency discrimination technique to the analysis of electroencephalographic signals.
p0057 A73-15052
The information content of successive RR-interval times in the ECG - Preliminary results using factor analysis and frequency analysis.
p0251 A73-30883
FREQUENCY ASSIGNMENT
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277
FREQUENCY DISTRIBUTION
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer
p0237 A73-28502
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
FREQUENCY MODULATION
NT PULSE FREQUENCY MODULATION TELEMETRY
Pulse duration-frequency modulation multichannel biotelemetry system for physiological parameter assessment during exercise, noting circuit diagrams of radio transmitter and receiver
p0052 A73-14281

Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise p0053 A73-14293
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system p0162 A73-23381
FREQUENCY RANGES
Human perception of musical intervals between simultaneous tones [IZF-1972-20] p0268 N73-23078
FREQUENCY RESPONSE
An earphone coupling system for acute physiological studies. p0581 A73-10829
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant p0128 A73-21540
Analysis of transient visual sensations above the flicker fusion frequency. p0129 A73-21566
A frequency response analysis of fusimotor-driven muscle spindles. p0158 A73-22934
The visual cortex as a spatial frequency analyser. p0308 A73-34840
Quantitative studies on optokinetic nystagmus in the monkey. p0318 A73-36459
Spatial frequency channels in human vision and the threshold for adaptation. p0346 A73-37416
Pure-tone equal-loudness contours for standard tones of different frequencies. p0387 A73-41176
Functional relationship between food preference and frequency of repetitious eating [AD-749079] p0102 N73-14100
Frequency selectivity and two tone inhibition in neural coding of acoustic stimuli [IZF-1972-25] p0264 N73-23050
FREQUENCY STABILITY
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments p0582 A73-11445
FREQUENCY SYNCHRONIZATION
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments p0582 A73-11445
Frequency discriminator for on-line measurements of entrainment and synchronization in EEG signals as related to human alertness [NASA-CR-129173] p0611 N73-11091
FRICTION
NT AERODYNAMIC DRAG
NT FLOW RESISTANCE
NT SKIN FRICTION
FRICTION DRAG
NT AERODYNAMIC DRAG
FRICTION PRESSURE DROP
U SKIN FRICTION
FRINGE PATTERNS
U DIFFRACTION PATTERNS
FROGS
Two visual systems in the frog. p0389 A73-41302
Comparison of development of auditory vesicle in frog embryos under weightless and terrestrial conditions [NASA-TT-F-14624] p0592 N73-10072
Mechanisms for controlling physiological rhythms in Rana pipiens [NASA-CR-131153] p0179 N73-19064
Increased toxicity of sympathomimetic amine stimulants on spinal reflexes in irradiated frogs p0212 N73-20063
FROSTBITE
Effect of skin wetting on finger cooling and freezing. p0360 A73-39779
FROZEN FOODS
Microbiological testing of Skylab foods. p0205 A73-27075
Production methods for preventing deterioration of freeze-dried foods [NASA-CR-128915] p0269 N73-23085
FROZEN LAKES
U LAKES
FUEL CELLS
Hybrid biological power cells for cardiac pacemakers - Materials evaluation. p0363 A73-39823
FUEL COMBUSTION
Thermal response of protective fabric/human skin system to JP-4 jet fuel fire [AD-759525] p0337 N73-26095
FUEL FLOW
NT PROPELLANT TRANSFER
FUEL TANKS
NT WING TANKS
FUELS
NT CHEMICAL FUELS
NT NUCLEAR FUELS
FUNCTIONAL ANALYSIS
NT FOURIER TRANSFORMATION
NT HARMONIC ANALYSIS
Measurements of automobile driver response functions in simulated steering control task with visual field display p0600 N73-10130
Double steering wheel forcing functions for estimating automobile driver manual control response p0601 N73-10132
Standard requirements for ultrasonic Doppler probes of cardiovascular systems in medical monitoring functions p0063 N73-12083
FUNCTIONS (MATHEMATICS)
NT ANALYTIC FUNCTIONS
NT DISTRIBUTION FUNCTIONS
NT FOURIER TRANSFORMATION
NT LIAPUNOV FUNCTIONS
NT NORMAL DENSITY FUNCTIONS
NT PROBABILITY DISTRIBUTION FUNCTIONS
NT SPLINE FUNCTIONS
NT TRANSFER FUNCTIONS
FUNGI
NT RHIZOPUS
NT SPORES
NT YEAST
Volatile terpenoids from aeciospores of Cronartium fusiforme. p0206 A73-27145
Space-related research in mycology concurrent with the first decade of manned space exploration. p0357 A73-39478
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus. p0397 A73-42171
Sterols of the fungi - Distribution and biosynthesis. p0429 A73-44699
Chemiotaxionomic survey of carotenoid pigments in several species and groups of Basidiomycetes [NASA-TT-F-14858] p0219 N73-20117
Chemical characteristics of mushroom pigments and mycological classifications [NASA-TT-F-14865] p0219 N73-20124
Phenotype numbers and survival rates of fungi exposed to space environment during Apollo 16 flight p0292 N73-24110
FUSION WELDING
NT ELECTRON BEAM WELDING
F4H AIRCRAFT
U F-4 AIRCRAFT

G

G FORCE
U ACCELERATION (PHYSICS)
GAGES
U MEASURING INSTRUMENTS
GAIN (AMPLIFICATION)
U AMPLIFICATION
GALLIUM ARSENIDE LASERS
Radiation hazards of gallium arsenide diode array lasers [AD-762277] p0370 N73-27975
GALVANIC SKIN RESPONSE
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under

normal conditions and in the case of memory impairment
p0206 A73-27106
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
Design and attachment of skin electrodes in human cardiac monitoring during space flight
p0065 N73-12095

GAMETOCYTES
Space flight factors effects on Drosophila development in terms of dominant, autosomal and sex-linked recessive lethals frequency, noting gametogenesis stage sensitivity
p0397 A73-42173

GAMMA RADIATION
U GAMMA RAYS

GAMMA RAYS
The study of biological macromolecules using perturbed angular correlations of gamma radiation.
p0589 A73-12648
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Effects of chronic irradiation of dogs with Co-60 gamma rays on the level of auto-antibodies
p0208 A73-27706
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation
p0305 A73-34230
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose
p0396 A73-42166
Dosimetric determination of absorbed gamma and neutron radiation on human phantom [AD-743005]
p0593 N73-10077
Neutron and gamma induced transient incapacitation in conditioned Macaca mulatta [AD-742076]
p0594 N73-10080
Morphological changes in testes and spermatogenesis process of dogs subjected to chronic and combined gamma irradiation
p0134 N73-16048
Antiradiation effectiveness of cysteamine in mice under various conditions of gamma radiation
p0212 N73-20067
Effectiveness of combined chemical protectors against mixed gamma-neutron radiation with neutron contributions to absorbed dose
p0212 N73-20068
Gamma radiation effects on toxic cysteamine elimination in irradiated and nonirradiated mice
p0213 N73-20070
Influence of head and stomach shielding on radiation sickness and animal survival from gamma-neutron irradiation
p0213 N73-20071
Influence of shielding head and anterior stomach on course of radiation sickness in dogs subjected to total lethal gamma irradiation
p0213 N73-20073
Stomach shielding effects on chromosomal aberration frequency in guinea pig and rat marrow cells after gamma radiation at doses of 50 to 200 r
p0213 N73-20074
GAST and GALT aminotransferases activity of dog blood serum following total exposure to gamma rays with stomach or head shielded
p0213 N73-20075
Characteristics of pathomorphological changes in rat internal organs subjected to gamma-neutron irradiation with head and stomach shielded
p0214 N73-20077
Mortality rate in antiradiation drug protected mice subjected to gamma radiation overloads
p0214 N73-20079
Effect of transverse overloads and gamma rays at 100 to 200 r on peripheral blood in dogs
p0214 N73-20083
Exposure to gamma rays from Co-60 and transverse loads and effectiveness of cysteamine and AET protection
p0215 N73-20086
Relative biological effectiveness of fast neutrons with gamma background
p0215 N73-20091
Effect of chronic irradiation of dogs by Co60 gamma rays on level of autoantibodies
p0216 N73-20100
Morphological changes in liver of dogs subjected to chronic gamma radiation
p0217 N73-20101
Proliferative activity of bone marrow in dogs exposed to three-year chronic gamma irradiation
p0217 N73-20102
Continuous low dose gamma irradiation effects on cell population kinetics of mice lymphoid tissue [NASA-CR-135723]
p0437 N73-31999

GANGLIA
NT NERVES
NT NEURONS
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
Receptive fields of retinal ganglion cells.
p0161 A73-23315
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396
Investigation of the geometry of the dendritic tree of retinal ganglion cells
p0349 A73-37944
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664

GAS ANALYSIS
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Design and performance of metabolic gas analyzer using mass spectrometer and digital data printout [NASA-CR-128842]
p0190 N73-19160

GAS BAGS
Decelerator sled simulation for testing air bag restraint system effects in passenger motor vehicle crash [PB-212706]
p0224 N73-20155

GAS CHROMATOGRAPHY
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Extraction and analysis by gas-liquid chromatography of catecholamine metabolites from biological tissue [AD-745944]
p0066 N73-12105

Gas chromatographic analysis of beryllium in aqueous solutions and biological tissues
[AD-753112] p0177 N73-18131
Gas chromatography-mass spectrometry for analyzing fatty acid and sterol concentrations in plant tissue samples
[NASA-CR-128740] p0186 N73-19131
Cost analysis of mass spectrometers and gas chromatographs for life support atmosphere monitoring
[NASA-CR-124306] p0341 N73-27076
GAS COMPOSITION
NT CARBON DIOXIDE CONCENTRATION
GAS DENSITY
Deep diving pulmonary functions of man using different breathing gas densities
[AD-749028] p0100 N73-14082
GAS DETECTORS
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
GAS DISCHARGE COUNTERS
U GAS DISCHARGE TUBES
GAS DISCHARGE TUBES
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
GAS DISSOCIATION
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
GAS DYNAMICS
Gas dynamic theory of gas exchange in organisms based on oxygen and carbon dioxide permanent partial pressure gradients in tissues, blood and lungs
p0169 A73-24523
GAS EXCHANGE
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615
Gas dynamic theory of gas exchange in organisms based on oxygen and carbon dioxide permanent partial pressure gradients in tissues, blood and lungs
p0169 A73-24523
Computer simulation of gas exchange in human lungs.
p0278 A73-31348
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
Mathematical model for photosynthetic gas exchanges in growing wheat and radish biopaks of life support systems
p0063 N73-12081
Metabolic changes and cardiac output of humans in hypokinetic bed rest study
p0255 N73-22013
Method for automatically processing indices of operator gas exchange during work in trainer using computers
p0444 N73-33035
GAS FLOW
NT AIR FLOW
GAS IONIZATION
NT ATMOSPHERIC IONIZATION
GAS LASERS
Argon-ion laser used to determine ocular effects of repetitive laser pulses on rhesus monkeys
[AD-746795] p0071 N73-13096
GAS MIXTURES
NT AIR
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201
Human ability to note changes in composition of inhaled air
p0182 N73-19090
Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control
p0182 N73-19093
GAS PHASES
U VAPOR PHASES
GAS PRESSURE
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
GAS TEMPERATURE
Temperature of exhaled air of healthy subjects
p0323 A73-36583
Calculation of minimum safe inspired gas temperature limits for deep diving
[AD-748197] p0103 N73-14104
GAS TRANSPORT
Gas transport in the human lung.
p0400 A73-42421
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Hemoglobin species diffusion effect on oxygen transport in moving and stationary flat films of hemoglobin solution
p0426 A73-43993
GAS VALVES
Design of anesthetic flow valve canister system for exhaust gas absorption and laminar ventilation system for operating rooms
p0231 N73-21141
GAS VISCOSITY
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509
GASEOUS DIFFUSION
A criterion for oxygen supply optimality in tissues and the capillary circulation rate
p0047 A73-13821
Indexes of ventilation distribution before/after airway occlusion in dogs, indicating collateral channel inspired gas distribution reduction
p0048 A73-14113
Significance of the Bohr and Haldane effects in the pulmonary capillary.
p0129 A73-21614
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.

p0381 A73-40274
A model of diffusion in the respiratory unit.
p0391 A73-41638
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
Cone model for oxygen diffusion in brain considering spatial tissue/capillary permeability
[RAE-LIB-TRANS-1663] p0333 N73-26060

GASES
NT AIR
NT ARGON
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT EXHAUST GASES
NT GAS MIXTURES
NT HELIUM
NT HYDROGEN
NT HYDROGEN IONS
NT LIQUID OXYGEN
NT NITROGEN
NT OXYGEN
NT RARE GASES
Effects of gas bubbles in decompression pathology of humans
[AD-748229] p0108 N73-15126

GASTROINTESTINAL SYSTEM
NT INTESTINES
NT RECTUM
NT STOMACH
Electrogastrographic data pertinent to exposures in a pressure chamber to moderate hypoxia levels
p0087 A73-17684
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789
Absorption of fructose in saline mixture used for enteritis therapy of children
[NASA-TT-F-14596] p0609 N73-11078
Physiology of depressed metabolic states and gastrointestinal responses to ionizing radiation
[NASA-CR-130381] p0133 N73-16038
Transverse acceleration effects on rat gastrointestinal response to drugs
p0181 N73-19085
Effects of radioprotective drugs on motor evacuatory functions in gastrointestinal tracts of healthy and irradiated rats
p0212 N73-20062
Effect of some radioprotective preparations on motor and evacuator function of gastrointestinal tract of healthy and irradiated rats
[DRIC-TRANS-2962] p0229 N73-21130
Effects of gastrointestinal pressure on rabbit eye nystagmus during barotrauma
p0253 N73-21983
Gastrointestinal proprioceptor effects on high altitude rabbit ocular reflexes
p0253 N73-21984
Composition of human gastrointestinal microflora during prolonged isolation
p0373 N73-29037

GATES (CIRCUITS)
NT THRESHOLD GATES

GAUSSIAN DISTRIBUTIONS
U NORMAL DENSITY FUNCTIONS

GAUSSIAN NOISE
U RANDOM NOISE

GENERAL AVIATION AIRCRAFT
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation
p0083 A73-16733
General aviation pilot operational profile study, discussing implications for airman certification standards, flight safety regulations and aircraft design
[SAE PAPER 730334] p0307 A73-34687
Fire hazard reduction in corporate aircraft oxygen system, covering hoses, regulators, manifolds, cylinders, leakage, combustion conditions and servicing procedures
p0357 A73-39215
Development and characteristics of inflatable airbag restraint system for use in general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127
Evaluation of hearing protectors for general aviation aircraft
[NASA-CR-133303] p0341 N73-27078

GENERAL DYNAMICS MILITARY AIRCRAFT
U MILITARY AIRCRAFT

GENETIC CODE
Russian book - Information macromolecules during radiation injury to cells.
p0060 A73-15707
Genetic code evolution in terms of abiotic polynucleotide synthesis, suggesting alternating sequences of purines and pyrimidines as polypeptide codes
p0162 A73-23469
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815

GENETICS
NT GENETIC CODE
NT MUTATIONS
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Russian book on radiation genetics of microorganisms covering lethal and mutagenic action of radiation on fungi, microscopic algae, bacteria and viruses
p0060 A73-15701
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus
p0090 A73-17929
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism
p0281 A73-31875
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Space flight factors effects on Drosophila development in terms of dominant, autosomal and sex-linked recessive lethals frequency, noting gametogenesis stage sensitivity
p0397 A73-42173
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Biostatistics of genetical processes in human populations
[NASA-CR-131508] p0229 N73-21131

GENITOURINARY SYSTEM
NT TESTES
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
Luciferase ATP assay procedure for determining bacterial infections in urinary tract
[NASA-CR-130797] p0173 N73-18096

GEOASTROPHYSICS
U GEOPHYSICS

GEOCHEMISTRY
NT BIOGEOCHEMISTRY
The sources of phosphorus on the primitive earth - An inquiry.
p0090 A73-17933
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis
p0396 A73-42163

GEOLOGY
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023

GEOMAGNETIC EFFECTS
U MAGNETIC EFFECTS

GEOMAGNETIC FIELD
U GEOMAGNETISM

GEOMAGNETIC LATITUDE
Geomagnetic latitude variation of cosmic radiation rates measured onboard Concorde SST prototypes, investigating solar flares
p0204 A73-26588
GEOMAGNETISM
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man.
p0092 A73-18033
GEOMETRY
NT CURVATURE
NT METRIC SPACE
NT PROJECTIVE GEOMETRY
NT TENSOR ANALYSIS
NT VECTOR ANALYSIS
GEOPHYSICS
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023
GEOTROPISM
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus.
p0397 A73-42171
GERMANY
Color vision requirements for German Air Force personnel
p0179 N73-19067
GERMICIDES
U BACTERICIDES
GERMINATION
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
GERONTOLOGY
Functional aging - Present status of assessments regarding airline pilot retirement.
p0387 A73-41161
GESTALT THEORY
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894
GLANDS (ANATOMY)
NT ADRENAL GLAND
NT GONADS
NT PANCREAS
NT PINEAL GLAND
NT PITUITARY GLAND
NT TESTES
NT THYROID GLAND
Transductal fluxes of Na, K, and water in the human eccrine sweat gland.
p0281 A73-31923
GLARE
Ophthalmological assessment of visual functional impairment due to glare, stimulus motion and aging changes
p0080 A73-16485
GLASSWARE
Initiator ignition effect in laboratory glass and polythene vessel studying dummy hand injuries during simulated accidents
[ERDE-TRANS-1] p0295 N73-24137
GLAUCOMA
Ocular tonus measurements for glaucoma detection in flying personnel, discussing subsequent test procedures in case of abnormal findings
p0586 A73-12158
Glaucoma development in aging flight personnel.
p0329 A73-36926
Patterns of diurnal variation in the intraocular pressure of airline pilots.
p0355 A73-39107
Ocular tension in flying personnel
p0383 A73-40347
GLOMERULUS
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours
p0123 A73-20978
Morphological changes in juxtaglomerular apparatus in kidneys of rats during multihour exposure to accelerations in different directions
p0133 N73-16045
GLOVES
Mercury, Gemini and Apollo space suits, discussing glove development, boot design, portable life support equipment and extravehicular mobility
p0289 A73-34025
Performance of prototype high pressure space suit glove
[NASA-CR-114532] p0112 N73-15162
Development of prototype high pressure space suit glove assembly
[NASA-CR-114535] p0151 N73-17120
GLOW
U LUMINESCENCE
GLUCOSE
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta
p0193 A73-25042
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes.
p0386 A73-41139
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
Mathematical model for in vivo study of glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys
[AD-751232] p0140 N73-16092
Effect of accelerations on active transport of glucose in small intestine of rats
p0442 N73-33021
GLUCOSIDES
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters
p0156 A73-22649
GLUTAMATES
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864
GLUTAMIC ACID
Relation between hyperbaric oxygenation and functional activity of differentiated brain with respect ot glutamic acid metabolism
p0368 N73-27960
GLYCERINS
U GLYCEROLS
GLYCEROLS
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122
GLYCOGENS
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732
GLYCOLYSIS
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta
p0193 A73-25042
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.

p0196 A73-25568
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602
GLYCOSIDES
U GLUCOSIDES
GNOTOBIOTICS
Use of ultrafine fiber filter cloth for removing bacterial contaminants from air
[NASA-TT-F-14940] p0293 N73-20123
GOAL THEORY
Mathematical models and physiological mechanisms of goal-directed behavior
[JPRS-60091] p0447 N73-33053
Model of organization of goal-directed behavior
p0448 N73-33061
GOGGLES
Physical and functional performance properties of laser safety goggles
[AD-746208] p0606 N73-10170
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
GONADS
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
GRADIENTS
NT PRESSURE GRADIENTS
NT TEMPERATURE GRADIENTS
GRADIOMETERS
U MAGNETOMETERS
GRADUATION
U CALIBRATING
GRAINS (FOOD)
NT CORN
NT WHEAT
Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat
p0378 N73-29335
GRATINGS
Foveal threshold additivity measurements for monochromatic and mixed light, using grating resolution as brightness criterion
p0246 A73-30398
GRAVIRECEPTORS
NT OTOLITH ORGANS
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems
p0280 A73-31518
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus.
p0397 A73-42171
Evolution of structural, cytochemical, and functional organization of gravity receptors in invertebrates and vertebrates
[NASA-TT-F-720] p0220 N73-20128
GRAVITATION
NT ARTIFICIAL GRAVITY
NT LUNAR GRAVITATIONAL EFFECTS
NT REDUCED GRAVITY
GRAVITATIONAL EFFECTS
NT LUNAR GRAVITATIONAL EFFECTS
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
Effect of hypergravity on the circadian rhythms of white rats.
[ASME PAPER 72-WA/BHF-14] p0061 A73-15877
Gravitational effects on biological systems in terms of animal body size, age, sex and posture as factors affecting acceleration tolerance
p0197 A73-25573
Some aversive characteristics of centrifugally generated gravity.
p0238 A73-28506
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation
p0242 A73-30022
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
Gravitational stress and exercise.
p0313 A73-35980
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Altered susceptibility to motion sickness as a function of subgravity level.
p0358 A73-39486
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808
Gravitational effects on animal ontogeny from centrifugation studies of acceleration tolerance, considering egg and embryo development, body composition, etc
p0397 A73-42174
Vertical arm reaching movements for various gravitational levels, measuring reach time and angular and lower arm velocities
p0424 A73-43218
Aerospace biology research, including physical principles of gravitational biology, such as forces, weight and mass, weightlessness, and size and scale effects
[NASA-CR-128471] p0593 N73-10075
Effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-129603] p0063 N73-12074
Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver
p0063 N73-12080
Transverse acceleration effects on human cardiovascular system
p0064 N73-12088
Renal component of antigravitational function in body
p0133 N73-16043
Instrumentation and techniques for determining effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119
Acceleration effects on mechanical impedance of human body in supine position
p0368 N73-27963
GREAT BRITAIN
Color vision requirements of Great Britain's Armed Forces
p0179 N73-19072
Chemotherapy for air crews in Great Britain
p0226 N73-21105
GROUND BASED CONTROL
NT AIR TRAFFIC CONTROL
Design, development, and evaluation of airport lighting control panel for airport traffic control towers
[FAA-RD-72-93] p0066 N73-12108
Space technology for developing ground based integrated medical laboratory
p0075 N73-13851
GROUND CREWS
Statistical analysis of occurrence of backache among Royal Air Force flight crews and ground crews to show effects of crew seats on physical comfort
[AD-745177] p0597 N73-10102
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101
Drug screening data for civil aviation personnel obtained by urinalyses
p0226 N73-21104
Prototype model for aircraft carrier landing officer
[AD-762728] p0377 N73-29064
GROUND EFFECT MACHINES
Operational investigation of combined all weather capabilities of Coast Guard motor lifeboat and 70 knot surface effect rescue vehicle

[AD-761460] p0370 N73-27974
GROUND SPEED
Driving speed in relation to interactions among automobile driver, roadway variables, and vehicle control
p0601 N73-10131
GROUND SUPPORT SYSTEMS
Evaluation of device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103
GROUP BEHAVIOR
U GROUP DYNAMICS
GROUP DYNAMICS
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241
Group performance in a visual signal-detection task.
p0194 A73-25182
GROUP THEORY
Reference image /brightness distribution functions/ existence and normalization under additive and multiplicative groups of transformations in visual field
p0432 A73-44908
GROUP 7A COMPOUNDS
U HALOGEN COMPOUNDS
GROWTH
NT CROP GROWTH
NT VEGETATION GROWTH
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development
p0051 A73-14256
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Growth response of bacteria and yeast in high pressure helium-oxygen environment
[AD-745334] p0596 N73-10096
Simulation of growth and mineral uptake by plants growing in lunar soil
[NASA-CR-134036] p0416 N73-30988
GRUMMAN MILITARY AIRCRAFT
U MILITARY AIRCRAFT
GUINEA PIGS
Mortality rate of guinea pigs after decompression treatment as function of water balance
[DLR-FB-71-20] p0099 N73-14075
Guinea pigs used to determine effect of intramuscular injections of drugs on fall-out and Bekhterev nystagmus occurring after unilateral and bilateral labyrinthectomies
p0134 N73-16049
Pharmacologic investigations of antagonistic effects of pyridines on isolated guinea pig ileum
[BMVG-FBWT-72-14] p0138 N73-16075
Bradycardia and death in guinea pigs exposed to acceleration overloads after injections of aminothiol group radioprotectors
p0211 N73-20057
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes
[AD-749323] p0258 N73-22035
Lesion threshold in guinea pig auditory sensation areas due to sonic booms
[ISL-33/72] p0369 N73-27966
GULF OF MEXICO
Marine biology literature compilation for Caribbean Sea and adjacent regions
p0261 N73-23022
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023
GULFS
NT GULF OF MEXICO
GYMNASTICS
U EXERCISE (PHYSIOLOGY)
GYNECOLOGY
Microelectrophoresis of human erthyrocytes as diagnostic tool in gynecology and obstetrics
[NASA-TT-F-14587] p0069 N73-13077
GYRATION
NT ROTATION
GYROPLANES
U HELICOPTERS

H

HABITABILITY
Recorded observations of crew member activities during Tektite 2 underwater habitability study
[NASA-CR-130034] p0140 N73-16094
Habitability factors during long-term space and undersea missions in confined habitats
[NASA-CR-130537] p0151 N73-17123
Habitability study of shuttle orbiter
[NASA-CR-128863] p0190 N73-19162
Habitability study of shuttle orbiter
[NASA-CR-128864] p0190 N73-19163
Habitability study of earth orbital space stations
[NASA-CR-124276] p0300 N73-25132
Solution to problem of endangered living space
[NRC-TT-1636] p0376 N73-29057
HABITATS
Multispectral remote sensing techniques applied to study changes in wildlife habitats
p0142 N73-16396
HABITUATION (LEARNING)
Alpha wave peak amplitude dependence on blocking pattern after stimulation during habituation-pseudoconditioning, conditioning and extinction
p0242 A73-29992
Effects of human alertness on vestibular nystagmus habituation
[AD-749352] p0103 N73-14108
HAIR
Evaluation of hazardous conditions created by facial hair on aircrew personnel wearing oxygen masks
[AD-754075] p0232 N73-21154
HALIDES
NT CALCIUM CHLORIDES
NT CHLORINE FLUORIDES
NT COPPER CHLORIDES
NT DICHLORIDES
NT HYDROFLUORIC ACID
NT HYDROGEN CHLORIDES
NT LITHIUM FLUORIDES
NT POTASSIUM CHLORIDES
NT SILVER CHLORIDES
NT SODIUM CHLORIDES
HALO PARACHUTING
U PARACHUTE DESCENT
HALOGEN COMPOUNDS
NT BROMINE COMPOUNDS
NT CALCIUM CHLORIDES
NT CARBON TETRAFLUORIDE
NT CHLORINE COMPOUNDS
NT CHLORINE FLUORIDES
NT COPPER CHLORIDES
NT DICHLORIDES
NT FLUOROCARBONS
NT FLUOROHYDROCARBONS
NT HYDROFLUORIC ACID
NT HYDROGEN CHLORIDES
NT IODINE COMPOUNDS
NT LITHIUM FLUORIDES
NT POTASSIUM CHLORIDES
NT SILVER CHLORIDES
NT SODIUM CHLORIDES
Human and male Charles River rat exposures to Halon 1301 under hypobaric conditions, simulating aircraft compartment
[AD-747958] p0066 N73-12106
Hepatotoxic effects of dichloromethane inhalation in mice
[AD-751434] p0138 N73-16081
HALOPHILES
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes.
p0579 A73-10625
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium,

Micrococcus halodenitrificans.
p0045 A73-13598
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599

HAMSTERS
Correlation of respiratory distress and ultrasonic transmission with severe decompression sickness in hamsters
[AD-743475] p0595 N73-10091

HAND (ANATOMY)
Specific features in the activity of the oxygen transport system of the organism during hand-performed working cycles of submaximum intensity
p0323 A73-36579
Computerized teleoperator manual control system for remote mechanical hand
p0602 N73-10143
Study of differences between left and right hand performance in compensatory tracking task
[RAE-TR-72117] p0141 N73-16098
Initiator ignition effect in laboratory glass and polythene vessel studying dummy hand injuries during simulated accidents
[ERDE-TRANS-1] p0295 N73-24137
Motor reaction model for hand motion in decision making manual task
[AD-761518] p0370 N73-27973
Heat exchange of hand as function of local thermal conditions
[NASA-TT-F-15143] p0445 N73-33043

HANDBOOKS
Hand book on ionizing radiation protection policies at Kennedy Space Center
[NASA-TM-X-69410] p0186 N73-19133
Handbook on structural evolution of vestibular apparatus
p0264 N73-23044
Environmental sanitation handbook for occupational medicine and health procedures at Kennedy Space Center
[NASA-TM-X-69522] p0440 N73-32020

HANDEDNESS
Handedness and adaptation to distortions of size and distance underwater
[AD-759722] p0337 N73-26098

HANDICAPS
Monocular pilot ability in securing and retaining license as compared to controls
p0387 A73-41163

HANDLING
U MATERIALS HANDLING

HANDLING EQUIPMENT
Safe handling system for iridium isotopes used in radiation therapy
p0231 N73-21143

HANDLING QUALITIES
U CONTROLLABILITY

HARDWOOD FORESTS
U FORESTS

HARMONIC ANALYSIS
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer
p0237 A73-28502

HARNESSES
Anthropometric dummy design improvements, detailing verisimilitude specifications for harness support in accident tests and design of chest, spine, shoulder and pelvic areas
p0306 A73-34617
Restraint systems /lap belts and shoulder harnesses/ for military, transport and general aviation aircraft, with emphasis on pilot and crew systems
[SAE PAPER 730291] p0306 A73-34656

HAZARDS
NT AIRCRAFT HAZARDS
NT FLIGHT HAZARDS
NT RADIATION HAZARDS
NT TOXIC HAZARDS
Health hazards in using electron beams for welding beryllium alloys
p0190 N73-19531

HEAD (ANATOMY)
NT CRANIUM
NT INTRACRANIAL CAVITY
NT SKULL
Impact on a simple physical model of the head.
p0170 A73-24770
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
Cat and rat lung damage due to hyperbaric oxygen exposure and head injury, discussing alveolar surfactants, sympathetic stimulation and monkey injuries
[AD-759298] p0238 A73-28507
A comparison and analysis of head sizes of Navy aircrew to the standard anthropometric data.
p0284 A73-32656
Biodynamic response of human head and neck to impact acceleration
[AD-747988] p0072 N73-13106
Mass, volume, center of mass, and mass moment of intertia determined for head and neck of human body
[AD-762581] p0377 N73-29065

HEAD MOVEMENT
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Direction-specific adaptation effects acquired in a slow rotation room.
p0049 A73-14154
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485
Adjustment of saccade characteristics during head movements.
p0201 A73-26222
Absolute motion parallax and the specific distance tendency.
p0234 A73-28096
Nystagmic response persistence to Fitzgerald-Hallpike caloric tests as function of directional cupular deflections due to head movement
p0238 A73-28510
Binaural acoustic field sampling, head movement and echo effect in auditory localization of sound sources position, distance and orientation
p0244 A73-30282
Space-time adaptation of visual position constancy.
p0304 A73-34223
Supranuclear structures regulating binocular eye and head movements.
p0317 A73-36451
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
Altered susceptibility to motion sickness as a function of subgravity level.
p0358 A73-39486
Development of mathematical model for slow phase rotational nystagmus induced by head movements
[AMRU-R-71-3] p0607 N73-11065
Apparent object movement due to optical distortion produced by head movement under water
[AD-749319] p0101 N73-14086
Anti-compensatory oculomotor responses in human visual tracking and vestibulo-ocular mechanism during rotational head movement in flight
p0110 N73-15140
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147
Compensatory oculogravic response of eye movement direction during slow head rotation
p0111 N73-15148
Predictive control of human eye tracking movements in response to visual stimuli
p0111 N73-15149

HEAD-UP DISPLAYS
Functional aspects of head-up display operation, discussing data accumulated by pilot during low visibility runway approach in executive jet
p0581 A73-11012

Performance evaluation of airborne audio-video recording system as training device in A-7D tactical fighter
[AD-744041] p0605 N73-10161
Human factors engineering for flight control/display system with on-line terminal
[AD-754916] p0223 N73-20148
Application of hologram optical element to pilot head-up display
[AD-758057] p0295 N73-24139
HEADSETS
U EARPHONES
HEALING
NT WOUND HEALING
Physical/electrical sealing mechanisms of myocardiac and muscle fiber healing after surface injury, considering ionic factors, sodium and calcium rates and contraction relation
p0198 A73-25600
HEALTH
NT HEALTH PHYSICS
NT MENTAL HEALTH
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
Cigarette-smoking and coronary atherosclerosis.
p0320 A73-36535
Industrial model for leave and overtime taking behavior of employees exposed to peak work activity periods in relation to health, demography, and job variables
p0143 N73-17055
Conference on occupational and environmental medical services provided to NASA employees
[NASA-TM-X-69074] p0146 N73-17078
Management of NASA employee health problems by automated medical system
p0146 N73-17079
Chronic disease health trends and mortality rates in employee population of NASA Goddard Space Flight Center
p0147 N73-17086
Feasibility of effective exercise and health evaluation and enhancement program for NASA employees
p0147 N73-17091
Medical services of operating environmental health program for industrial workers
p0147 N73-17093
HEALTH PHYSICS
NT PUBLIC HEALTH
Civil aviation medicine functional standardization and expansion, emphasizing preventive medicine, health education and operational safety
p0170 A73-24718
Book - An introduction to radiation protection.
p0205 A73-27048
The effects of fatigue on health and flight safety.
p0303 A73-34080
Biological effects of microwave irradiation on humans - literature review
[UR-3490-29] p0107 N73-15120
Remote sensing techniques for detection and prevention of Rocky Mountain spotted fever, Encephalitis, Malaria, and Red Tide environmental health problems
[NASA-CR-128727] p0135 N73-16060
Abstracts on radiation and health physics
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069
Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants
[AD-751438] p0139 N73-16084
Public health exposure limits for air pollutants
[AD-751437] p0140 N73-16088
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications
[AD-751425] p0140 N73-16090
Multiphase health screening and medical history questionnaire for preventive/occupational physical examinations
p0143 N73-17052
Medical concepts and functional management in NASA Environmental Health Program
p0143 N73-17056
Physical exercise effects on health of NASA personnel
p0145 N73-17069
Industrial health measures and environmental control to insure worker productivity
p0146 N73-17077
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons
[AGARD-R-599] p0149 N73-17106
Survey of industrial hygiene and safety in Air Forces operations
[AD-751897] p0151 N73-17126
Toxicity of long term methyl isobutyl ketone exposure in dogs, monkeys, mice, and rats
[NASA-TM-X-69100] p0177 N73-18130
HEARING
NT ACOUSTIC FATIGUE
NT BINAURAL HEARING
Book - Human factor aspects of aircraft noise.
p0206 A73-27450
Impairment to hearing from exposure to noise.
p0287 A73-33676
Hearing conservation studies covering impulse noise produced threshold shift, damage risk criteria, ultrasound hazards and hearing protection
p0309 A73-35326
Impulse noise damage risk criteria.
p0310 A73-35327
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Voltage controlled attenuator circuit for acoustic signal duration and repetition control in hearing examinations
p0432 A73-44910
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101
Effects of light aircraft noise on hearing
[NASA-CR-130987] p0173 N73-18095
Voice and hearing in system of acoustic orientation of animals
[NLL-DRIC-TRANS-3056-(3623.66)] p0291 N73-24101
Evaluation of hearing protectors for general aviation aircraft
[NASA-CR-133303] p0341 N73-27078
HEARING LOSS
U AUDITORY DEFECTS
HEART
NT CARDIAC AURICLES
NT CARDIAC VENTRICLES
NT MYOCARDIUM
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
Book - Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Regression of altitude-produced cardiac hypertrophy.
p0433 A73-45065
Gaussian curve simulation of multiple-dipole model of ventricular depolarization
[TH-71-E-25] p0067 N73-12116
Power sources and requirements for human artificial hearts
[COO-2155-4] p0102 N73-14095
Microscopic morphological changes in dog cardiac muscle after chronic gamma irradiation
p0372 N73-29027
HEART DISEASES
NT ANGINA PECTORIS
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008

Fingerprint patterns incidence relation in congenital vitium cordis patients, using Henry dactyloscopic classification
p0581 A73-11080

Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license
p0582 A73-11238

Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505

Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506

Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507

Left ventricular end-diastolic pressures following selective coronary arteriography.
p0583 A73-11508

Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444

Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445

Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446

High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511

Relationship of anginal symptoms to lung mechanics during myocardial ischemia.
p0589 A73-12820

Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059

Exercise testing for evaluation of cardiac performance.
p0043 A73-13538

Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541

Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542

Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543

Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891

P wave of electrocardiogram in early ischaemic heart disease.
p0048 A73-13892

Computerized ECG interpretation system for heart and circulatory disorder detection and diagnosis and health screening
p0056 A73-14660

Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200

An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value.
p0059 A73-15521

Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643

Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154

Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582

Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279

Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596

Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872

Cardiac arrhythmias generation by impulse initiation and conduction abnormalities, considering depressed excitability, reentrant excitation, summation, inhibition and parasystole
p0097 A73-18874

Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches.
p0115 A73-19152

Assessment of hypoxia in the human heart.
p0118 A73-19928

The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929

Sinus venosus atrial septal defect - Analysis of fifty cases.
p0121 A73-20368

Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802

Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803

Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804

Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807

Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174

Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697

Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome.
p0199 A73-25698

Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288

Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289

Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361

Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362

Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890

Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051

Echocardiography status, potentialities and requirements in congenital heart disease diagnosis, considering feasibility in left ventricular performance evaluation
p0243 A73-30053

Coronary atherosclerosis development and prevention in children, discussing hyperlipidemia, hypertension, cigarette smoking and high risk identification
p0243 A73-30065

Predicting coronary heart disease.
p0244 A73-30351

Risk factors for developing myocardial infarction and other diseases - The 'Men born in 1913' study.
p0245 A73-30352
Book on echocardiography covering examination of mitral, aortic, tricuspid and pulmonic valves, ventricles, atrium, pericardial effusion, coronary artery disease and tumors
p0245 A73-30358
Prevention of the atherosclerotic diseases - Opportunities for military medicine.
p0248 A73-30518
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
Diagnostic power of the Q wave - Critical assay of its significance in both detection and localization of myocardial deficit.
p0319 A73-36527
Mid- and late changes in the QRS complex.
p0320 A73-36528
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
Book - Atherosclerosis and coronary heart disease.
p0320 A73-36531
Hereditary aspects of coronary atherosclerosis.
p0320 A73-36532
Cigarette-smoking and coronary atherosclerosis.
p0320 A73-36535
Coronary atherosclerosis and ischemic myocardial damage.
p0320 A73-36538
Factors influencing coronary blood flow in the presence of coronary obstructive disease.
p0321 A73-36539
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540
Problems in the recognition of angina pectoris.
p0321 A73-36541
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542
Clinical manifestations of acute myocardial infarction.
p0321 A73-36543
Electrocardiographic diagnosis of myocardial infarction - Pitfalls of a graphic technique.
p0321 A73-36544
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations
p0321 A73-36546
Evaluation, diagnosis and treatment of common structural complications of acute myocardial infarction.
p0321 A73-36548
The prognosis of myocardial infarction.
p0321 A73-36549
Responsibility for ischemic cardiopathies in civil aviation flight personnel
p0327 A73-36902
The use of simple indicators for detecting potential coronary heart disease susceptibility in the third-class airman population.
p0328 A73-36912
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
Mechanisms of cardiac arrhythmias - From hypothesis to physiologic fact.
p0347 A73-37582
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826
The early diagnosis of coronary heart disease - Critical review.
p0404 A73-42827
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors
p0404 A73-42828
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease.
p0405 A73-42829
Indications and value of coronary arteriography.
p0405 A73-42830
The value of different angiographic procedures in coronary heart disease.
p0405 A73-42831
Myocardial infarction susceptibility correlated with psychosocial factors in life change measurement studies
p0405 A73-42833
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization
p0405 A73-42835
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease
p0405 A73-42837
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West

Germany, June 1972.
p0405 A73-42856
Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease.
p0408 A73-42975
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
Physical exercise and physical fitness program for preventing and treating human coronary heart disease
p0143 N73-17051
Personality, occupation, and job stress effects on physiological risk factor in human coronary heart disease
p0143 N73-17054
Dynamic electrocardiography in periodic health examinations for detection of cardiac abnormalities
p0144 N73-17065
Dynamic electrocardiographic standardization for detecting cardiac risk factor in personnel
p0145 N73-17066
Physical exercise effects on health of NASA personnel
p0145 N73-17069
Continuous monitoring of hypertension and hypercholesterolemia in NASA employees for prevention of heart disease and disability
p0145 N73-17072
Blood lipid diagnostic and therapeutic measures to prevent heart disease in humans
p0145 N73-17073
Blood pressure and cholesterol level screening for preventing heart diseases in flight crews of commercial airline
p0146 N73-17076
Risk scoring system for identifying subjects with high risk to coronary heart disease
p0146 N73-17080
Electrocardiographic stress testing for determining influence of occupational and other stresses on ischemic heart disease
p0146 N73-17082
Clinical analysis of relationship between VPB and mortality rate in patient with acute myocardial infractions
p0146 N73-17083
Precoronary care and sudden death prevention due to coronary disease in industrial workers
p0146 N73-17084
Latent coronary insufficiency detection in flying personnel using barochamber loading
p0253 N73-21988

HEART FUNCTION
SEE HEART MINUTE VOLUME
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography.
p0583 A73-11509
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
Exercise testing for evaluation of cardiac performance.
p0043 A73-13538
Evaluation of cardiac performance in exercise.
p0043 A73-13539
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540
Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Cardiac output and oxygen transport in early ontogenesis
p0084 A73-16738
Pathology of angina pectoris.
p0085 A73-17276
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements
p0087 A73-17682
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.
p0094 A73-18335
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369
A model to predict respiration from VCG measurements.
p0123 A73-20578
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217

Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Order and disorder in the rhythm of the heart. /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Distribution of systemic blood flow during cardiopulmonary bypass.
p0158 A73-22930
Myocardial metabolism during exposure to carbon monoxide in the conscious dog.
p0159 A73-22935
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
Heart activity characteristics in a human operator during a control process
p0164 A73-23806
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Origin of the external electric field detected near animals and men
p0166 A73-23942
Controlled tachycardia through voluntary change in exercise regime, investigating relation between heart rate and blood circulation
p0169 A73-24521
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships
p0197 A73-25590
Cardiac action potential rising phase and generation mechanism, discussing pacemaker potential and slow depolarization initiating upstroke in spontaneously active cardiac cells
p0197 A73-25592
Ionic current mechanisms for cardiac muscle repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies
p0197 A73-25593
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport
p0197 A73-25594
Sinoatrial node pacemaker cell functions, discussing ionic and metabolic principles, electrical activity, membranal effects of neurohormonal control factors and cardioactive drug effects
p0197 A73-25595
Cardiac membrane capacitance physiological properties and measurements in Purkinje fibers, ventricular and atrial muscles and heart tissues
p0197 A73-25596
Physical/electrical sealing mechanisms of myocardiac and muscle fiber healing after surface injury, considering ionic factors, sodium and calcium rates and contraction relation
p0198 A73-25600
Stethoscope- or phonocardiograph-detectable systole-associated left atrial sound in terms of activity recording, sound genesis, hemodynamic correlations and clinical applications
p0199 A73-25696
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026

A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
Heart function mechanism explanation by activation potential stimulation of muscular contraction via calcium ions
p0207 A73-27690
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
Exogenous free fatty acid effects on hypoxic myocardial function in isolated isometric rat papillary muscles
p0241 A73-29572
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066
German monograph - Comparative investigations regarding the phenomenon of force potentiation in the case of the heart muscle of cold-blooded and warm-blooded animals.
p0249 A73-30669
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatigue
p0278 A73-31393
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
Phase progression of the QRS complexes in electrocardiograms versus the inscribing directions of the QRS loops in vectorcardiograms.
p0286 A73-33116
Effect of maximal work load on cardiac function.
p0288 A73-33991
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234
Advances in electrocardiography; Proceedings of the Symposium, Emory University, Atlanta, Ga., May 10-13, 1971.
p0318 A73-36516
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
Molecular diffusion model of cardiogenic gas mixing during inspiration at alveolar boundary in dogs

p0323 A73-36652
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397
Use of a video system in the study of ventricular function in man.
p0348 A73-37797
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.
p0399 A73-42341
Russian book - Integral topograms of heart potentials.
p0401 A73-42489
Measuring characteristics of the displacement cardiograph.
p0403 A73-42676
A simple cardiac contractility computer.
p0403 A73-42677
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068
Electronic instruments for continuous cardiovascular systems measurements [NASA-TT-F-14492]
p0604 N73-10154
Changes in vectorcardiograms of atherosclerotic flying personnel after glucose testing
p0253 N73-21989
Alterations in myocardial contractility induced by bed rest
[NASA-CR-128968]
p0333 N73-26056

HEART MINUTE VOLUME
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124
Changes in gaseous metabolism and cardiac output per minute during local muscle work in man
p0164 A73-23809
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260

HEART RATE
NT ARRHYTHMIA
NT BRADYCARDIA
NT SYSTOLE
NT TACHYCARDIA
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data
p0577 A73-10171
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Passive and active warm-up effects on track athletes heart and respiration rates
p0042 A73-13123
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
Interdependence of oxygen uptake, heart rate and ventilation during treadmill exercise from regression slope analysis of lag logarithms
p0048 A73-14118
Changes in cardiac rhythm during sustained high levels of positive /+Gz/ acceleration. [AD-754146]
p0050 A73-14157
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields.
p0053 A73-14289
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
Cardiac arrhythmias generation by impulse initiation and conduction abnormalities, considering depressed excitability, reentrant excitation, summation, inhibition and parasystole
p0097 A73-18874
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699
Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
Heart rate variability and work-load measurement.
p0250 A73-30879
Mental load and the measurement of heart rate variability.
p0250 A73-30881
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Relationship of physiological strain to change in heart rate during work in the heat.
p0283 A73-32548
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520

The use of simple indicators for detecting potential coronary heart disease susceptibility in the third-class airman population.
p0328 A73-36912
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Serial correlation of physiological time series and its significance for a stress analysis
p0352 A73-38159
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751
Stress and strain in student helicopter pilots.
p0386 A73-41155
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565
Submaximal exercise with increased inspiratory resistance to breathing.
p0400 A73-42419
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160
Rhesus monkey heart rate during exercise using implanted ECG telemeters
[AD-744930] p0595 N73-10089
Sleep stage classification analysis on heart rate data recordings
[AD-740946] p0605 N73-10167
Electrocardiogram recordings on magnetic tape for computerized analysis
[AD-748105] p0075 N73-13124
Threshold circuits with feedback channels for cardiac R-wave detection in electrocardiographic heart rate monitoring
[NASA-TN-D-7152] p0112 N73-15158
Changes in electrocardiographs of Rhesus monkeys as function of age
[NASA-TT-F-14675] p0136 N73-16062
Long term exercise effects on cardiovascular response in NASA personnel with periodic ergometric evaluation
p0145 N73-17067
Clinical analysis of relationship between VPB and mortality rate in patient with acute myocardial infractions
p0146 N73-17083
Effects of prolonged bed rest on body temperature and heart rate periodicity in man
p0175 N73-18113
Mental and cardiovascular acceleration stress effects on heart rate studied by beta adrenergic blockage
p0188 N73-19149
Cardiac systole kinematics in humans exposed to hypoxic atmosphere
p0253 N73-21986
Diurnal cardiac rhythm fluctuation for cardiovascular evaluation of flight personnel
p0254 N73-21997
Metabolic changes and cardiac output of humans in hypokinetic bed rest study
p0255 N73-22013
Inflight heart and respiratory rate recording of pilots, using nose clip transducers
p0367 N73-27953
Influence of He, N2, and N20 environments on physiological parameters of rats
p0371 N73-29019
Exercise effects on human heart rate and oxygen uptake
p0371 N73-29020

HEART VALVES

Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444
Case histories of valvular cardiopathies in military pilots, determining tolerance to flight
p0115 A73-19209
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome.
p0199 A73-25698
Book on echocardiography covering examination of mitral, aortic, tricuspid and pulmonic valves, ventricles, atrium, pericardial effusion, coronary artery disease and tumors
p0245 A73-30358
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry.
p0348 A73-37795
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947

HEAT

NT DRY HEAT

Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks
[OES-8/72] p0421 N73-31024

HEAT ACCLIMATIZATION

Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063

HEAT BALANCE

Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Man induced changes in earth climate by environment pollution and heat production
[PB-213676/2] p0267 N73-23074

HEAT CONDUCTION

U CONDUCTIVE HEAT TRANSFER

HEAT CONTENT

U ENTHALPY

HEAT DISSIPATION

U COOLING

HEAT DISSIPATION CHILLING

U COOLING

HEAT EFFECTS

U TEMPERATURE EFFECTS

HEAT EQUATIONS

U THERMODYNAMICS

HEAT EXCHANGERS

Cryogenic heat exchanger for removal of waste heat from spacecraft environmental control life support system
[NASA-CR-124301] p0340 N73-27071

HEAT GAIN

U HEATING

HEAT MEASUREMENT

Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies
p0049 A73-14123

Human calorimeter with a new type of gradient layer. p0324 A73-36662
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement. p0395 A73-42054
Proton magnetic resonance spectra and calorimetry of interactions between ions, inhibitors, and substrates with two ribonucleases [BNYG-PBWT-72-7] p0137 N73-16071

HEAT PIPES
Prediction of long-term heat-pipe performance from accelerated life tests. p0384 A73-40438

HEAT REGULATION
U TEMPERATURE CONTROL

HEAT RESISTANCE
U THERMAL RESISTANCE

HEAT SINKS
Design, development, and fabrication of liquid cooled space suit using ice pack heat sink - Vol. 1 [NASA-CR-114624-VOL-1] p0419 N73-31006

HEAT SOURCES
Performance of battery powered electrically heated suit for reconnaissance divers [AD-749847] p0102 N73-14101

HEAT STROKE
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects p0045 A73-13749

HEAT TOLERANCE
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains. [AD-751735] p0576 A73-10163
Acclimatization to severe dry heat by brief exposures to humid heat. p0045 A73-13700
Physical work induced hyperthermia effects on detection rate in visual vigilance task performance in hot and humid environment p0095 A73-18469
Central tracking task performance simultaneously with response to peripheral stimulus under high heat stress environments p0096 A73-18473
Work-heat test comparisons of dry and wet heat and exercise programs for heat acclimatization p0158 A73-22932
Portable electronic thermometer for temperature measurement during exercise elevation of body temperature in heat acclimatization experiment p0169 A73-24567
Comparison of the metabolic effects of centrifugation and heat stress in man. p0196 A73-25338
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions p0207 A73-27701
High temperature tolerance enhancement in rats by thermal training and medicinal preparations p0207 A73-27705
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads. p0250 A73-30880
The combined influence of microwave radiation and an adverse climate on the organism p0277 A73-31170
The effects of core temperature elevation and thermal sensation on performance. p0283 A73-32396
Relationship of physiological strain to change in heart rate during work in the heat. p0283 A73-32548
Biological indicators and the effectiveness of sterilization procedures. p0288 A73-33692
Tolerance to heat following cold stress. p0325 A73-36784
Human performance at elevated environmental temperatures. p0325 A73-36787
Study of the heart rate of humans exposed to heat p0331 A73-36942
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport p0331 A73-36947
Model of evaporation responses to heat load increases p0352 A73-38150
Responses of men and women to two-hour walks in desert heat. p0360 A73-39784
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp. p0361 A73-39791
Work-heat tolerance derived from interval training. p0400 A73-42416
Physiological regulatory mechanisms of water and electrolyte levels in human body in high temperature environment [NASA-TT-F-13915] p0592 N73-10066
Heat regulation and adaptation of rats exposed to helium oxygen atmosphere p0065 N73-12096
Human adaptation to hypoxic hypoxia for increased resistance to physical stress p0182 N73-19095
High temperature tolerance of rats under normal conditions, after thermal conditioning and combined with drugs p0216 N73-20099
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature [NASA-TT-F-14861] p0219 N73-20123
Human physiological response to heat stress in preflight operation [AD-759173] p0338 N73-27060
Cooling effects on human tolerance to work induced heat stress and collapse [NASA-CR-134059] p0438 N73-32005

HEAT TRANSFER
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT RADIATIVE HEAT TRANSFER
Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies p0049 A73-14123
A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature. p0424 A73-43292
Numerical analysis of thermal resistance of air layers in air permeable clothing [NLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089
Examination of physical processes governing heat transfer through air-penetrable clothing in wind [DRIC-TRANS-2921] p0113 N73-15166
Design, development, and fabrication of liquid cooled space suit using ice pack heat sink - Vol. 1 [NASA-CR-114624-VOL-1] p0419 N73-31006
Heat exchange of hand as function of local thermal conditions [NASA-TT-F-15143] p0445 N73-33043

HEAT TRANSFER COEFFICIENTS
Comparative study of patches for liquid cooled garments. p0345 A73-37404

HEAT TRANSMISSION
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT HEAT TRANSFER
NT RADIATIVE HEAT TRANSFER

HEAT TREATMENT
Red cell flexibility and pressure-flow relations in isolated lungs. p0158 A73-22927

HEATING
NT ATMOSPHERIC HEATING
NT RADIANT HEATING
NT RADIO FREQUENCY HEATING
Influence of isolated heating of spinal column on respiratory rate and panting in dogs [NASA-TT-F-14998] p0338 N73-27054
Food heating tests in different atmospheres [NASA-CR-134040] p0419 N73-31012

HEAVY COSMIC RAY PRIMARIES
U HEAVY NUCLEI
U PRIMARY COSMIC RAYS

HEAVY ELEMENTS
NT PLUTONIUM 238
HEAVY IONS
Delta ray particle track structure theory for radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields p0196 A73-25423
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17. p0313 A73-35946
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina. p0315 A73-36129
Frequency of heavy ions in space and their biologically important characteristics. p0398 A73-42178
The radiobiological effects of heavy ions on mammalian cells and bacteria. p0398 A73-42182
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments p0398 A73-42183
Heavy ion irradiation effects on bacteria mutations in balloon flight and accelerator experiments, comparing with cosmic rays p0399 A73-42184
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds p0399 A73-42185
HEAVY NUCLEI
Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping p0095 A73-18417
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments. p0343 A73-37150
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space. p0398 A73-42181
Apollo 16 experiment using biostack to determine effects of heavy nuclei on biological organisms p0232 N73-21761
BIOSTACK experiment on Apollo 16 for studying combined action of heavy high energy loss nuclei and space flight factors on resting biological systems p0266 N73-23062
H' COPTER ATTITUDE INDICATORS
ATTITUDE INDICATORS
HELICOPTERS
HELICOPTER CONTROL
Perceptual considerations for a wide field of view, helicopter night landing system /HENILAS/. p0081 A73-16705
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
HELICOPTERS
NT P-531 HELICOPTER
NT UH-1 HELICOPTER
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen [AHS PREPRINT 720] p0309 A73-35061
Analysis of helicopter pilot and passenger reaction to vibration environment to determine effects of discrete frequencies and combinations of harmonic frequencies p0591 N73-10019
Helicopter performance in civilian air rescue operations [AD-748695] p0101 N73-14087
Helicopter flying in poor light and featureless terrain and color vision abnormality p0180 N73-19075
HELIUM
Thermoregulatory reactions of animals in a helium-oxygen medium p0088 A73-17695
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere p0123 A73-20979
Helium-cold induced hypothermia in the white rat. p0205 A73-26975
Growth response of bacteria and yeast in high pressure helium-oxygen environment [AD-745334] p0596 N73-10096
Heat regulation and adaptation of rats exposed to helium oxygen atmosphere p0065 N73-12096
Visual evoked responses from divers subjected to hyperbaric conditions simulating depths to 1200 feet breathing various gas mixtures [AD-749325] p0108 N73-15127
Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control p0182 N73-19093
Biological evaluation of influence of helium-oxygen atmosphere on culture of mammalian cells p0443 N73-33024
HELIUM-OXYGEN ATMOSPHERES
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm. p0399 A73-42201
HELMETS
Protective helmets performance evaluation for design optimization, considering failure analysis from aircraft accident reports p0284 A73-32655
A comparison and analysis of head sizes of Navy aircrew to the standard anthropometric data. p0284 A73-32656
Helmets effectiveness evaluation from acceleration and impact tests, discussing test criteria and civilian and military standards p0286 A73-33132
Technique for extemporaneously obtaining an electroencephalogram p0330 A73-36937
Audiometric thresholds for bare headed subjects, or wearing M1 helmet, and experimental helmet [AD-745121] p0260 N73-22053
Evaluation of helmet weight on head by military personnel [AD-748412] p0261 N73-22056
Impact resistance of crash helmets for agricultural aviation pilots [ARL/SM-NOTE-390] p0420 N73-31014
HEMATOCRIT
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia p0279 A73-31502
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli. p0433 A73-45064
HEMATOCRIT RATIO
Red cell volume with changes in plasma osmolarity during maximal exercise. p0324 A73-36654
Erythropoietin production in dogs exposed to high altitude and carbon monoxide. p0358 A73-39599
The specific resistance of blood at body temperature. p0402 A73-42670
Erythrocyte volume in acidified venous blood from exercising limbs. p0436 A73-45557
Hemoglobin and erythrocyte increase in rat adaptation to hypoxic hypoxia p0255 N73-22005
HEMATOLOGY
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights p0208 A73-27710
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate p0237 A73-28476
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/. p0241 A73-29751
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW

/4 ata/.
p0326 A73-36794
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159
Erythrocyte volume in acidified venous blood from exercising limbs.
p0436 A73-45557
Hematology of miniature pigs after rapid decompression
[DLR-FB-73-63] p0446 N73-33047

HEMATOPOIESIS
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599

HEMATOPOIETIC SYSTEM
Differentiations and maturations in red and white blood cells construction in red bone marrow, noting hematopoietic system formation from single source cell
p0085 A73-17473
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Leukopenic response of dog bone marrow for evaluating hematopoietic tissue function
p0255 N73-22009

HEMODYNAMIC RESPONSES
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167
Renal vascular response to saline infusion from radioactive Xe washout and sodium excretion concentration data
p0577 A73-10170
High altitude adaptation in mountain inhabitants of Tian Shan and Pamir, discussing effects on hemodynamic and pulmonary functions
p0584 A73-11922
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523
Cerebral circulation alteration during hypothermia
p0081 A73-16698
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931
Time course of pulmonary vascular response to hypoxia in dogs.
p0120 A73-20168
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Hemodynamics alteration caused by acute hypoxia in animals with denervated carotid sinuses
p0236 A73-28350
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Normalisation of haemodynamic changes caused by action of prolonged accelerations in rats.
p0314 A73-35985
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains
p0323 A73-36581
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868
Ventilatory and hemodynamic responses to acute hypoxia and hypercapnia in Hereford calf, comparing with man
p0360 A73-39782
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Cardiopulmonary responses of male and female swine to simulated high altitude.
p0432 A73-45058
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high-mountain conditions

p0217 N73-20107
Long term hypokinesia effect on rats hemodynamic system
p0262 N73-23026
Physiological and hemodynamic adaptations to CO levels and exercise in nonsmoking normal men [PB-213834/1] p0267 N73-23073
Influence of monochromatic light on physiological processes of blood [NASA-TT-P-14941] p0297 N73-25111
Lower body decompression effects on human cardiovascular hemodynamic system
p0373 N73-29032
Human hemodynamic responses and vestibular tolerances to body sway tests
p0373 N73-29034
Variations of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroid in blood during physical work noting physical training dependence [DLR-FB-72-48] p0412 N73-30072

HEMODYNAMICS
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292
Spline function interpolation in interactive hemodynamic simulation.
p0098 A73-18889
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804
Modification of the electroencephalograph 4EEG-1 for polygraphy
p0154 A73-22370
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches
p0408 A73-43103
Functional changes in systemic and cerebral hemodynamics with respect to vestibular stresses accompanying low accelerations
p0217 N73-20108
Techniques for determining effects of prolonged weightlessness on cardiovascular system of subhuman primates [NASA-CR-131890] p0252 N73-21980

HEMOGLOBIN
NT CARBOXYHEMOGLOBIN
NT OXYHEMOGLOBIN
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599
Oxygen transport augmentation mechanism for human hemoglobin, considering hemoglobin translational mobility absence effects
p0362 A73-39795
Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions
p0426 A73-43929
Hemoglobin species diffusion effect on oxygen transport in moving and stationary flat films of hemoglobin solution
p0426 A73-43993
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
Response of coronary blood flow to pH-induced changes in hemoglobin-O2 affinity.
p0433 A73-45061
Design of electrophoretic mass screening tester for sickle cell anemia
p0231 N73-21140
Effects of hyperoxia on heme biosynthesis [AD-756836] p0294 N73-24125

HEMORRHAGES
Digestive hemorrhages in aircrew - Individual and collective safety
p0332 A73-36952

HEMOSTASIS
U HEMOSTATICS

HEMOSTATICS
Hemotherapy of coagulation system disturbances of hepatolienal origin
p0428 A73-44299

HEPARINS
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319

HEREDITY
Russian papers on human adaptability covering altitude and temperature acclimatization, work capacity and anthropogenetic and medicogenetic factors
p0584 A73-11921
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism
p0281 A73-31875
Hereditary aspects of coronary atherosclerosis.
p0320 A73-36532
Human intrapair twin differences, examining age, height, weight, heart volume, metabolism, respiratory rate and monozygous/dizygous differences
p0361 A73-39792
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

HETEROCYCLIC COMPOUNDS
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT ASCORBIC ACID
NT ATROPINE
NT AZULENE
NT BIOTIN
NT HYOSCINE
NT INDOLES
NT PYRIDOXINE
NT PYRROLES
NT THIAMINE
NT TRYPTOPHAN

HEURISTIC METHODS
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks

p0117 A73-19548
Ergatic modeling as dynamic goal-oriented physical process based on heuristic autonomous information-structured organization system with regulated model-human operator interaction
p0241 A73-29418

HEXOKINASE
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.
p0196 A73-25568

HIBERNATION
Hibernation applications in manned space flight, considering feasibility and advantages
p0050 A73-14170
Low body temperature effects on learned behavior retention under hibernation conditions in squirrels
p0078 A73-16324
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612
Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
Serotonin content in various parts of the brain during hibernation and awakening
p0278 A73-31390
Serotonin content variations in the fore-brain during hibernation
p0322 A73-36567
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603
Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns
p0406 A73-42859
Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc
p0406 A73-42862

HIGH ACCELERATION
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog.
p0196 A73-25337
Subjective effects of sustained acceleration, including positive, negative, forward, backward, and lateral acceleration effects
p0105 N73-15095

HIGH ALTITUDE
Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy
p0168 A73-24514
Simulated high altitude determination of interrelation of systematic and cellular responses to acute and chronic hypoxia
[AD-743536]
p0594 N73-10081
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high-mountain conditions
p0217 N73-20107
Measurement of pulmonary extravascular water volume during exposure to simulated high altitude
[AD-763355]
p0418 N73-31004

HIGH ALTITUDE BREATHING
The diluter-demand oxygen system used during the international Himalayan expedition to Mount Everest.
p0194 A73-25145
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
Pressure chambers for testing effect of oxygen inspiration on fatigue during flight
[JPRS-59041]
p0264 N73-23051
Cardiopulmonary adaptations of man to moderately high altitude
[AD-755192]
p0267 N73-23075
Respiratory function and blood acid base equilibrium in human adaptation to high altitude environment
p0372 N73-29030

HIGH ALTITUDE ENVIRONMENTS
High altitude acclimatization and mountain climbing effects on human organism, considering oculomotor, cardiovascular and respiratory responses and endurance
p0124 A73-20991
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular
p0157 A73-22926
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation
p0208 A73-27713
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers
p0248 A73-30519
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
High altitude effects on cerebral and cardiovascular systems of monkeys
[AD-745891]
p0610 N73-11085
Centrineuroqenic etiology for pulmonary changes of high altitude pulmonary edema
[AD-756940]
p0294 N73-24127

HIGH ALTITUDE FLIGHT
U HIGH ALTITUDE

HIGH ALTITUDE PRESSURE
High altitude aircraft cabin pressurization for crews and passengers, discussing altitude tolerance, reaction times, decompression and oxygen equipment
p0251 A73-30937

HIGH ALTITUDE TESTS
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Coding data of 2565 individual human altitude chamber tests
[NASA-CR-114550]
p0136 N73-16066

HIGH EFFICIENCY
U EFFICIENCY

HIGH ENERGY INTERACTIONS
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180

HIGH GRAVITY (ACCELERATION)
U HIGH GRAVITY ENVIRONMENTS

HIGH GRAVITY ENVIRONMENTS
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
High g approach for cockpit design
[AD-757216]
p0295 N73-24138

HIGH PRESSURE
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525
Performance of prototype high pressure space suit glove
[NASA-CR-114532]
p0112 N73-15162
Development of prototype high pressure space suit glove assembly
[NASA-CR-114535]
p0151 N73-17120

HIGH PRESSURE OXYGEN
Sensitivity of the brain to repeated exposures of

hyperbaric oxygen.
p0195 A73-25328
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Cat and rat lung damage due to hyperbaric oxygen exposure and head injury, discussing alveolar surfactants, sympathetic stimulation and monkey injuries
[AD-759298] p0238 A73-28507
Growth response of bacteria and yeast in high pressure helium-oxygen environment
[AD-745334] p0596 N73-10096

HIGH SENSITIVITY
U SENSITIVITY

HIGH SPEED
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471

HIGH SPEED FLIGHT
U HIGH SPEED

HIGH TEMPERATURE
Effect of high ambient temperature on calcium content of human bone tissue
p0444 N73-33033

HIGH TEMPERATURE ENVIRONMENTS
Russian papers on human adaptability covering altitude and temperature acclimatization, work capacity and anthropogenetic and medicogenetic factors
p0584 A73-11921
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650
Hyperfiltration technique applied to wash water reclamation at elevated temperatures.
[ASME PAPER 73-ENAS-27] p0350 A73-37982

HILLER HILITARY AIRCRAFT
U MILITARY AIRCRAFT

HINDRANCE
U CONSTRAINTS

HIPPOCAMPUS
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
Rabbit hippocampal neuron activity relation to theta-wave phases from cell potential and extracellular recording analyses
p0118 A73-20005
Biopotential alpha and theta rhythms of neocortex and hippocampus of milk drinking cats after food and water deprivation
p0157 A73-22862
Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response
p0166 A73-24326
Sinusoidal stimuli induced electrical activity of hippocampus in waking rhesus monkeys and baboons
p0167 A73-24330
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381
Serotonin content variations in the fore-brain during hibernation
p0322 A73-36567
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus
p0362 A73-39803
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718

HIS BUNDLE
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564

HISTAMINES
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle
p0064 N73-12089

HISTOLOGY
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
Pathomorphological and histochemical analysis of Luna 16 fine lunar soil fraction biological effect on mice
p0056 A73-14569
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination.
p0194 A73-25136
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatique
p0278 A73-31393

Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues
p0314 A73-35983
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624
The effect of low X-ray doses on the central nervous system
p0427 A73-44179

HISTORIES
NT CASE HISTORIES

HOLOGRAPHY
A model of a memory device based on neuron-like elements which realizes the holographic principles of data recording and readout
p0061 A73-15792
Application of hologram optical element to pilot head-up display
[AD-758057] p0295 N73-24139

HOLOMORPHISM
U ANALYTIC FUNCTIONS

HOMEOSTASIS
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152
Ergatic organism defined as multipurpose nonautonomous control system with homeostasis with respect to functional operations conservation
p0119 A73-20048
Water-salt homeostasis mathematical model, solving equations with analog and digital computers
p0166 A73-23941
Formalization of an arterial pressure stabilization system
p0168 A73-24467
Book - Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545
Mathematical model for in vivo study of glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056

HOMEOTHERMS
Chronic acceleration effects on homeotherm physiological adaptation in terms of body weight, tolerable field intensity, growth and fat deposition inhibition, etc
p0398 A73-42177
Primitive mammals phylogeny relationship to homeothermic abilities, discussing body temperature, thermoregulation, basal metabolism rates, hibernation, nychthemeral rhythms and responses to heat and cold
p0406 A73-42860

HOMING DEVICES
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen
[AHS PREPRINT 720] p0309 A73-35061

HORMONE METABOLISMS
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367
Renal component of the antigravitation function of the organism
p0123 A73-20976
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Sinoatrial node pacemaker cell functions, discussing ionic and metabolic principles, electrical activity, membranal effects of neurohormonal control factors and cardioactive drug effects
p0197 A73-25595
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769
Statistical analysis of steroid levels in parotid secretions of humans under prolonged mental stress
[AD-747682] p0072 N73-13104
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093] p0173 N73-18104
Human adrenocorticotropin level measurements as indication of adaptation to space flight stress
p0174 N73-18109
Water immersion model for simulating renin, aldosterone, and natriuresis effects of prolonged weightlessness on man
p0174 N73-18110
Multiple immunoassay system for determining parathyroid hormone, calcitonin, and vitamin D in human blood
p0174 N73-18112
Prolonged bed rest effects on human blood hormone level periodicities
p0175 N73-18114
Human pituitary and adrenal hormone reserve in acceleration stress tolerance
p0188 N73-19150
Chromatographic determination of aldosterone level in urine

[RAE-LIB-TRANS-1682] p0333 N73-26061
Chromatographic determination of urine corticosteroids
[RAE-LIB-TRANS-1694] p0333 N73-26062
HORMONES
NT ALDOSTERONE
NT CORTICOSTEROIDS
NT CORTISONE
NT HYDROXYCORTICOSTEROID
NT PITUITARY HORMONES
NT THYROXINE
Adaptive hormone action and nonspecific adaptive function of steroid hormones, discussing stress resistance mechanisms of steroids pharmacologically classified as syntoxic and catatoxic p0155 A73-22536
Radioimmunoassay of urinary antidiuretic hormone excretion in man considering water loading and dehydration effects p0174 N73-18107
Measurement of antidiuretic hormone excretions in human urine as indication of neurosecretory stress response during space flight p0174 N73-18108
HOT-FILM ANEMOMETERS
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity. p0085 A73-17274
HOVERCRAFT
U GROUND EFFECT MACHINES
HOVERING
Optimal control model for predicting manual VTOL pilot performance in longitudinal hovering tasks p0601 N73-10134
HOVERING STABILITY
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft p0282 A73-32044
HU-1 HELICOPTER
U UH-1 HELICOPTER
HUGHES MILITARY AIRCRAFT
U MILITARY AIRCRAFT
HUMAN BEHAVIOR
Conjoint-measurement framework for the study of probabilistic information processing. p0588 A73-12545
Reflex act structural components interaction in terms of reflection, creativity and organism-environment relations, noting subjective and objective perception and attitude formation p0061 A73-15798
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving. p0093 A73-18241
A vecto-oculographic approach to fast sleep eye movements in man. p0242 A73-29994
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth p0307 A73-34746
The problem of spiritual requirements and the theory of human higher nervous activity p0362 A73-39796
Experimental analysis of conditions for onset of emotional stress p0362 A73-39800
Human operator model for man machine control behavior in biodynamic flight environment p0597 N73-10105
Input adaptive behavior model of human operator in pursuit tracking task p0597 N73-10108
Suboptimal sampling and control behavior of human operator in output prediction task for automatic process p0598 N73-10114
Analysis of cosmonaut emotional stress as determined by physiological and behavioral responses
[NASA-TT-F-14654] p0067 N73-12113
Human operator adaptive behavior in slowly changing dynamic system
[AD-748243] p0102 N73-14097
Functional relationship between food preference and frequency of repetitious eating
[AD-749079] p0102 N73-14100
Industrial model for leave and overtime taking behavior of employees exposed to peak work activity periods in relation to health, demography, and job variables p0143 N73-17055
Probabilities models of organizational behavior and human subjective performance
[IZF-1973-3] p0268 N73-23076
Relations between sociometric variables and criteria of ability and behavior of student pilots p0367 N73-27954
Algorithm of simple inductive interaction between man and surrounding objects and events p0447 N73-33058
Principles of construction for class of models of intelligent behavior p0448 N73-33059
Experimental evaluation of model of motor behavior p0448 N73-33060
Model of organization of goal-directed behavior p0448 N73-33061
HUMAN BEINGS
Abstracts on microwave radiation effects on human and animal physiological functions and life expectancy
[MBL-1972-6] p0591 N73-10061
Influence of illumination on electro-oculographic measurements of human eye potential
[AMRU-B-71-1] p0607 N73-11064
Development of mathematical model for slow phase rotational nystagmus induced by head movements
[AMRU-B-71-3] p0607 N73-11065
Oxygen, carbon dioxide, nitrogen, and noble gases for environment suitable for humans p0104 N73-15093
Biophysical mechanisms of noninvasive measurement of CVP in man
[NASA-CR-130348] p0133 N73-16039
Correlation of physical activity and oxygen consumption between man and mouse
[FOA-1-B-1233-A5] p0149 N73-17108
Biological and toxicity effects of aluminum and other chemicals in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136
Pharmacological measures for prophylactic and restorative treatment of men and animals during space flight p0212 N73-20060
Influence of cysteamine hydrochlorine and vitamin B and C prophylaxis on radiation sickness in humans p0214 N73-20078
Electrophysiological sleep patterns of human and animal brains
[NASA-TT-F-740] p0257 N73-22023
Interdependence of slow and rapid brain waves during sleep p0257 N73-22027
Man and natural environment protection and management
[JPRS-59369] p0339 N73-27064
Influence of man on biospheric balance
[JPRS-59366] p0339 N73-27065
Factors affecting stereoscopic vision and depth perception in human beings
[AD-759261] p0375 N73-29050
Control mechanism in accommodation-vergence eye movement system in human eyes and importance of central and peripheral vision in pattern perception by human beings p0411 N73-30061
Measurement of control mechanism of accommodation-vergence eye movement system in human eyes using electro-optical measuring instrument p0411 N73-30062
HUMAN BODY
Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles p0576 A73-10155
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for

anthropomorphic locomotion system synthesis
p0581 A73-11052
Perspiration secretion distribution over human body based on extended Kerslake cylinder model, comparing with predicted 4 hr sweat rate
p0041 A73-13122
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range
p0088 A73-17748
Human tendon stress recovery after load removal as function of time, sex, age and side differences
p0119 A73-20033
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
Anthropometric dummy design improvements, detailing verisimilitude specifications for harness support in accident tests and design of chest, spine, shoulder and pelvic areas
p0306 A73-34617
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts and their detection on the body surface.
p0319 A73-36518
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
Electrical field distribution in the human body.
p0427 A73-44216
Physiological regulatory mechanisms of water and electrolyte levels in human body in high temperature environment
[NASA-TT-F-13915]
p0592 N73-10066
Dosimetric determination of absorbed gamma and neutron radiation on human phantom
[AD-743005]
p0593 N73-10077
Computer program for measuring specific radioisotopes contained in human body
[AD-745578]
p0593 N73-10078
Whole body, plus or minus a(z) vibration on amplitude and frequencies of postural sway in human subjects
[AD-745580]
p0596 N73-10098
Dynamic model for nonlinear simulation of human postural control system using sticks
p0599 N73-10116
Tests of fabric friction on human skin for aircrew tropical clothing comfort
[RAE-TR-72037]
p0604 N73-10157
Influence of 45 to 60 day space flight on physiological functions of human body
[NASA-CR-129131]
p0609 N73-11074
Blood plasma hyperosmolality and antidiuretic hormone inhibition in alcoholic intoxication
[NASA-TT-F-13910]
p0609 N73-11079
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517]
p0063 N73-12076
Hypoxia effects on human gastric motor functions in pressure chamber experiments using electrogastrography
p0064 N73-12085
Transverse acceleration effects on human cardiovascular system
p0064 N73-12088
Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle
p0064 N73-12089
Power sources and requirements for human artificial hearts
[COO-2155-4]
p0102 N73-14095
Effects of alterations in barometric pressure on humans
p0104 N73-15092
Effects of prolonged weightlessness during space flight on human skeletal and hematopoietic systems
[NASA-TT-F-730]
p0107 N73-15116
Biological effects of microwave irradiation on humans - literature review
[UR-3490-29]
p0107 N73-15120
Research on laser irradiation effects, sensory psychophysiology, and human blood processing for military medicine
[AD-749440]
p0108 N73-15130
Radiation effects on human visual and vestibular analyzer functions
[AD-750499]
p0109 N73-15132
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134]
p0142 N73-16104
Stabilization methods in collecting and shipping of human sera for chemical analyses
p0143 N73-17053
Influence of infrasound on human body functions
p0147 N73-17085
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093]
p0173 N73-18104
Radioimmunoassay of urinary antidiuretic hormone excretion in man considering water loading and dehydration effects
p0174 N73-18107
Measurement of antidiuretic hormone excretions in human urine as indication of neurosecretory stress response during space flight
p0174 N73-18108
Human adrenocorticotropin level measurements as indication of adaptation to space flight stress
p0174 N73-18109
Water immersion model for simulating renin, aldosterone, and natriuresis effects of prolonged weightlessness on man
p0174 N73-18110
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators
p0174 N73-18111
Multiple immunoassay system for determining parathyroid hormone, calcitonin, and vitamin D in human blood
p0174 N73-18112
Effects of prolonged bed rest on body temperature and heart rate periodicity in man
p0175 N73-18113
Prolonged bed rest effects on human blood hormone level periodicities
p0175 N73-18114
Skylab experiments to assess weightlessness effects on human nutritional metabolism and musculoskeletal function
p0175 N73-18115
Weightlessness and hypodynamia effects on bodily functions during space flight
p0180 N73-19078
Human nitrogen and water/salt metabolisms in controlled regenerative atmosphere
p0181 N73-19089
Influence of immersion in temperature controlled bath on circulation and water balance in human body
[NASA-TT-F-14834]
p0185 N73-19124
Free amino acid excretion in urine as test for early diagnosis of radiation damage in humans
p0215 N73-20092
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826]
p0216 N73-20093
Urinalysis methodology for detection of abusive and therapeutic drugs in man
p0228 N73-21117
Chromatographic and polarographic methods for determining metabolic levels of hypnotic drugs in blood plasma and urine of man
p0228 N73-21118
Effects of human biorhythms on chemotherapy and drug evaluation
p0228 N73-21119
Cholinesterase reactivator as antidote in human organophosphate poisoning
p0254 N73-21998

Physiological stress effects of space flight on human body
[JPRS-57139] p0254 N73-22002
Physiological effects of long term hypodynamic weightlessness simulation on humans
p0255 N73-22010
Human regional blood circulation changes during bed rest experiment
p0255 N73-22012
Lower body negative pressure for preventing body fluid shifts during weightlessness
p0256 N73-22017
Long term bed rest effects on human retinal blood circulation and intraocular pressure
p0263 N73-23038
Radiation effects on human chromosomal aberrations in peripheral blood lymphocytes
p0263 N73-23041
Optical modulation transfer functions of human eye for white light
[IZF-1973-2] p0264 N73-23047
Thermal effects of microwave and radio frequency radiation on biological systems
[MBL-1971-7-PT-1] p0264 N73-23048
Accuracy of various tracer methods for measuring body water compartments during bed rest
[NASA-TR-R-406] p0295 N73-24133
Synchronization kinetics in control of movement links in human extremities
p0336 N73-26089
Acceleration effects on mechanical impedance of human body in supine position
p0368 N73-27963
Exercise effects on human heart rate and oxygen uptake
p0371 N73-29020
Pure oxygen and oxygen/nitrogen atmospheres for preventing decompression disease in astronauts
p0372 N73-29029
Human hydroxycorticosteroid and aldosterone excretions during hypodynamic space flight conditions
p0373 N73-29031
Lower body decompression effects on human cardiovascular hemodynamic system
p0373 N73-29032
Human body temperature dynamics in adaptation to changed work-sleep cycles
p0373 N73-29036
Composition of human gastrointestinal microflora during prolonged isolation
p0373 N73-29037
Response variations of microphone worn on human body
[BM-RI-7810] p0376 N73-29058
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
U.S., Soviet, and Polish standards for radiation levels for humans
p0415 N73-30905
Physiological stress effects of aerospace environment on human body and animals
[NASA-TT-F-15081] p0437 N73-32001
Hypothalamus as internal heat regulator for warm-blooded animals
[NASA-TT-F-15138] p0437 N73-32002
Physical fitness effects on human thermoregulation during exercise
[NASA-TT-F-15142] p0437 N73-32003
Computerized simulation of anatomically correct geometrical model of human body
[NASA-CR-134043] p0440 N73-32022
Treadmill running effect on human oxygen consumption
p0441 N73-33013

HUMAN CENTRIFUGES

Positive-pressure breathing as a protective technique during +Gz acceleration.
p0361 A73-39793
Feasibility of multichannel rheography for studying cardiovascular system on centrifuge
p0065 N73-12094
Aerial combat acceleration environment testing of human performance capability using human centrifuges
[AD-759174] p0300 N73-25134

HUMAN ENGINEERING

U HUMAN FACTORS ENGINEERING

HUMAN FACTORS ENGINEERING

Angular measurements of foot motion for application to the design of foot-pedals.
p0580 A73-10773
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
German monograph - Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man.
p0047 A73-13818
Human factors evaluation of labelled radar displays.
p0049 A73-14155
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
The problem of human efficiency in automated control systems
p0079 A73-16410
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718
Computer programs for operator performance time prediction and workspace design
p0082 A73-16721
A human factors approach to lighting recommendations and standards.
p0083 A73-16730
Transinformation and real time identification applied to the study of pilot workload
p0085 A73-17195
Human factor role in flying personnel errors, noting man machine system performance and medical service engagement
p0094 A73-18258
Implications of psychoanalytic factors for Air Force operations.
p0196 A73-25340
Ergonomic endurance limits, physiological strains and fatigue assessment in video coding information task performance as function of work shift time length
p0198 A73-25649
Human factors aspects in aircraft electronic display systems, discussing cathode ray tubes /CRT/ and light emitting diodes /LED/ applications and characteristics
p0204 A73-26500
Book - Human factor aspects of aircraft noise.
p0206 A73-27450
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
Heart rate variability analysis for ergonomics purposes, discussing interpolations, algorithms and physiological effects and spectral analysis methods
p0250 A73-30882
System engineering aspects of the man-machine interface.
p0287 A73-33645
Aircraft crash injury reduction through seat and restraint design, discussing dummy size considerations, seat belts, aircraft acceleration and injury types
[SAE PAPER 730290] p0306 A73-34655
Nonadjectival rating scales in human response experiments.
p0310 A73-35400
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills
p0344 A73-37328

Waste Management System overview for future spacecraft.
[ASME PAPER 73-ENAS-18] p0350 A73-37974
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle.
[ASME PAPER 73-ENAS-42] p0351 A73-37989
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990
Russian book - Psychological problems of activity regulation.
p0393 A73-41884
Effect of the information panel structure on operator activity
p0394 A73-41889
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations
p0429 A73-44673
Analysis of helicopter pilot and passenger reaction to vibration environment to determine effects of discrete frequencies and combinations of harmonic frequencies
p0591 N73-10019
Development of mathematical model to analyze traveler acceptance factors in short haul air carrier operations
p0591 N73-10023
Analysis of research activities conducted to determine criteria for passenger comfort in various methods of transportation
p0591 N73-10024
Indicators and controls for validating human reliability data
[AD-744551] p0594 N73-10085
Overview of literature concerning retention of learned skills with emphasis on space flight skill retention
[NASA-CR-128611] p0603 N73-10152
Performance tests to determine proficiency of maintenance personnel in servicing fuel start solenoid in UH-1 helicopter
[AD-745163] p0605 N73-10166
Effect of mood on human performance, possibility of using skin analyzer for communication, and effect of prolonged exposure to depths of 160 m on mental functioning
[JPRS-57541] p0068 N73-13072
Engineering psychology for developing practical designs of man machine systems
[AD-748237] p0074 N73-13121
Anthropometric data of Japanese Air Self-Defense Force personnel
p0101 N73-14091
Bibliography of research reports and publications issued by Human Engineering Division for April 1946 to December 1970
[AD-749933] p0103 N73-14103
Human factors engineering to determine maximum control forces capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
Measurement and effects of triaxial vibration on pilots in P-531 (Scout) helicopter under different flight conditions
[ISVR-TR-58] p0141 N73-16100
Electronic detectors and computer software for analyzing human electroencephalographs in isolated environment
[AD-751272] p0142 N73-16105
Conceptual model for pilot workload
p0142 N73-17010
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Physical exercise and physical fitness program for preventing and treating human coronary heart disease
p0143 N73-17051
Problems of environmental pollution and natural resource depletion caused by man
[JPRS-58113] p0151 N73-17121
Habitability factors during long-term space and undersea missions in confined habitats
[NASA-CR-130537] p0151 N73-17123
Interaction of man machine systems
[JPRS-58290] p0178 N73-18136
Interaction between man and electronic computer in operational planning
p0178 N73-18138
Bibliography on human factors in man machine interactions and systems design
[AD-752800] p0178 N73-18141
Accuracy of method of constant stimuli for studying sensory capabilities of man in relation to display systems
[AD-753009] p0187 N73-19141
Flight test program to study human factors problems and flight crew performance in military aircraft
p0188 N73-19145
Measures to determine psychophysiological reactions of military flight crews to flying stress
p0188 N73-19148
Use of psychometric tests to account for subjective variations in operations performance relative to target acquisition
p0191 N73-19974
Research in space biology and medicine
[JPRS-58620] p0216 N73-20094
Human factors criteria for adaptive computer aiding in man-machine control system
[AD-754835] p0222 N73-20147
Human factors engineering for flight control/display system with on-line terminal
[AD-754916] p0223 N73-20148
Quantitative description of mobility for human torso
[AD-754924] p0223 N73-20151
Photographic recording of aircraft in near midair collision conditions to determine feasibility of collision avoidance based on visual perception of pilot
[CDC-JL-5] p0231 N73-21147
Psychophysiological analysis of job performance for optimizing operator production in man machine systems
[NASA-TT-F-14888] p0232 N73-21150
Psychological, physiological, and work hygiene problems in ergonomic technology
[JPRS-58792] p0260 N73-22050
Evaluation of helmet weight on head by military personnel
[AD-748412] p0261 N73-22056
Workload effects on operator grip pressure and neuromuscular transmission in manual tracking task error
[AD-757252] p0269 N73-23089
Human factors in design of aircraft in-flight monitoring and automatic landing system for low weather operation
p0270 N73-23901
Human habitability data for zero gravity environmental architecture
[NASA-TM-X-69322] p0295 N73-24135
Revised edition of human engineering guide to equipment design
[AD-758339] p0296 N73-24140
Correlation between instructor rating of students and successful completion of military flight training course
[AD-757693] p0296 N73-24146
Design requirements for remotely controlled master-slave manipulators
p0335 N73-26076
Human factors in design of avionics subsystems considering training costs and performance of

Air Force personnel
[AD-759583] p0337 N73-26096
Human factors analysis of astronaut working conditions in space vehicles
[NASA-TT-F-750] p0366 N73-27946
Design approaches to application of Boyle's law to emergency suits for fliers
[AD-761797] p0369 N73-27970
Bibliography of anthropometric information for Air Force human factors engineering
[AD-762287] p0371 N73-27978
Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347
Human factors investigations and acclimatization research conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29348
Time shift effects on human 17-hydroxy corticosteroid diurnal excretion noting transmeridian flights
[DLR-FB-73-58] p0412 N73-30070
Ergonomic research and design principles for automatic control and man machine systems
[NASA-TT-F-716] p0413 N73-30079
Ergonomic solution to organizational problems of human living conditions and activities
p0413 N73-30080
Psychological conception of operator participation in ergonomic process
p0413 N73-30081
Ergonomic control system information models
p0414 N73-30082
Operational principles and functions of mnemonic diagrams in controlled system
p0414 N73-30083
Direct and indirect environmental factors affecting functional state of operators
p0414 N73-30084
Influence of emotional states on human operator performance and efficiency
p0414 N73-30085
Methods and procedures for ergonomic research
p0414 N73-30086
Military personnel management and human factors engineering
[AD-763168] p0415 N73-30094
Soviet research on space biology, aerospace medicine, and human factors engineering
[JPRS-59952] p0415 N73-30983
Requirements for mobility aids and restraint devices for use by personnel of space shuttle - Vol. 4
[NASA-CR-133994] p0419 N73-31009

HUMAN FACTORS LABORATORIES

Human response to vibration -- test facilities, equipment, experiments and publications
[ISVR-TR-60] p0415 N73-30093
Pilot performance under simulated conditions of modified aircraft control dynamics, navigational task complexity, and induced stress
[AD-764760] p0441 N73-32025

HUMAN PATHOLOGY

Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs
p0585 A73-12151
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
Pathology of angina pectoris.
p0085 A73-17276
Book - Peripheral vascular diseases: Diagnosis and management.
p0089 A73-17871
Physiological effects of microwave electromagnetic fields on human and animal organisms, considering etiology, diagnostics and prophylaxis
p0093 A73-18256
Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus nematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538

Method of PaCO2 determination in men with functional disorders of external respiration
p0239 A73-29075
Characteristics of spontaneous oxygen tension variations in human brain structures
p0249 A73-30844
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545
The prognosis of myocardial infarction.
p0321 A73-36549
The role of the sympathetic section of the vegetative nervous system in the training of the organism for the influence of statokinetic irritants.
p0327 A73-36903
The use of simple indicators for detecting potential coronary heart disease susceptibility in the third-class airman population.
p0328 A73-36912
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925
Hepatic lesions observed among flight crews following aviation accidents
p0330 A73-36933
Ribes Nigrum anthocyanosides in ophthalmology
p0330 A73-36935
Annex 13 and the work of the aviation pathologist - Practical problems.
p0347 A73-37739
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments
p0398 A73-42183
Radiological assessment of the vertebral column from the point of view of aviation medicine
p0409 A73-43131
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses
p0409 A73-43132
Chromatographic determination of gaseous metabolites released by man during reduced food intake
p0064 N73-12091
Effects of gas bubbles in decompression pathology of humans
[AD-748229] p0108 N73-15126
Industrial health hazard in chronic exposure to monomethylhydrazine and dose related hemolytic anemia in humans
[AD-751440] p0139 N73-16087
Blood lipid diagnostic and therapeutic measures to prevent heart disease in humans
p0145 N73-17073
Periodic health examinations and automatic processing of medical histories for detection and prevention of human diseases
p0145 N73-17074
Blood pressure and cholesterol level screening for preventing heart diseases in flight crews of commercial airline
p0146 N73-17076
Bibliography on titanium toxicity in human and animal organisms
[ORNL-TIP/TIRC-72-65] p0186 N73-19135
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128
Electropolygraphic analyses of sleep patterns in humans with neurological disorders
p0257 N73-22024

Somnofunctional mapping of deep brain waves in neurological patients
p0257 N73-22029
Pathophysiological justifications for using drugs in aerospace medicine
[NASA-TT-F-736] p0257 N73-22033

HUMAN PERFORMANCE
NT ASTRONAUT PERFORMANCE
NT OPERATOR PERFORMANCE
NT PILOT PERFORMANCE
A method for aiding human operator performance in a noncompensatory tracking task.
p0578 A73-10323
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
Effects of intermittent and continuous noise on serial search performance.
p0044 A73-13560
Human factors evaluation of labelled radar displays.
p0049 A73-14155
Prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance.
[DFVLR-SONDDR-268] p0050 A73-14158
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft.
p0050 A73-14161
Identification and adjustment of psychological factors to improve solar patrol observing.
p0057 A73-14841
Energy cost of muscle work in a state of fatigue
p0080 A73-16697
Observer target acquisition performance dependence on target position within restricted visual field
p0081 A73-16711
Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Double cross-validation of video cartographic symbol location performance.
p0082 A73-16719
Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance
p0082 A73-16720
A human factors approach to lighting recommendations and standards.
p0083 A73-16730
Estimation of the passing of four consecutive hours.
p0086 A73-17524
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system
p0089 A73-17775
Sensory, learned, and cognitive mechanisms of size perception.
p0091 A73-18031
Statistical correlation between human mental activity and EEG beta rhythm wave energy and frequency characteristics
p0092 A73-18159
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis
p0093 A73-18244
Physical work induced hyperthermia effects on detection rate in visual vigilance task performance in hot and humid environment
p0095 A73-18469
Central tracking task performance simultaneously with response to peripheral stimulus under high heat stress environments
p0096 A73-18473
A method for the investigation of interpolated information and time effects in short term retention.
p0096 A73-18475
German monograph - The objectivization of the effect of load and stress on an information-reception process of man with the aid of acoustically evoked potentials.
p0122 A73-20389
German monograph - Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram.
p0122 A73-20391
High altitude acclimatization and mountain climbing effects on human organism, considering oculomotor, cardiovascular and respiratory responses and endurance
p0124 A73-20991
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Fatique levels of cerebral hemispheres in response to visual task and test stimuli, noting left hander reduced performance capacity
p0157 A73-22925
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Group performance in a visual signal-detection task.
p0194 A73-25182
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
Ergonomic endurance limits, physiological strains and fatique assessment in video coding information task performance as function of work shift time length
p0198 A73-25649
Effects of prolonged dark adaptation on autokinetic movement.
p0202 A73-26322
Flashblindness recovery following exposure to constant energy adaptive flashes.
p0238 A73-28505
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509
Oxygen consumption alteration effects on human endurance capacity as function of relative work, muscle blood flow and anaerobic metabolism
p0241 A73-29753
Psychoacoustic theory of signal detectability based on mathematical input-output mapping model and memory role in human auditory system
p0243 A73-30278
Vector correlation theory and neural mechanisms of binaural signal detection in human auditory system
p0244 A73-30283
Optimal lighting for visual tasks, discussing color, type, transillumination, crossed polarization, brightness patterns, diffuse reflection and surface shadowgraphing
p0247 A73-30498
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/
p0249 A73-30843

The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
Optimal duration of endurance performance on the cycle ergometer in relation to maximal oxygen intake.
p0283 A73-32397
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
Book - Biological rhythms and human performance.
p0286 A73-33154
The explanation and investigation of biological rhythms.
p0286 A73-33155
Circadian rhythms in human mental performance from waking day, round of clock and simulated shiftwork studies
p0286 A73-33156
Daytime human performance and temperament rhythms as function of individual introversion-extroversion rating
p0286 A73-33157
Industrial work rhythm and between-day fluctuation studies 1920-1969, emphasizing industrial record and between-day fluctuations
p0287 A73-33160
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel
p0303 A73-34078
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Spatial information coding in the human visual system - Psychophysical data.
p0309 A73-35240
Human performance at elevated environmental temperatures.
p0325 A73-36787
Physical energy expenditure in long-haul cabin crew.
p0326 A73-36793
The mechanisms of the occurrence of emotional stress in man.
p0328 A73-36920
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251
Interaction between contours in visual masking
p0345 A73-37395
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260
Aerobic capacity of relatively sedentary males.
p0353 A73-38360
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task.
p0353 A73-38378
Air traffic controller responsibilities and performance evaluation criteria development, discussing manager/monitor functions, field evaluation tests and training criteria
p0353 A73-38472
Sleep loss in air cabin crew.
p0355 A73-39109
Visual responsiveness repeat variability magnitude during prolonged sessions and time of day
p0357 A73-39479
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli
p0363 A73-39804
Effect of carbon monoxide on time perception.
p0381 A73-40000
Sleep deprivation effects on accuracy and speed of response selection and execution.
p0385 A73-40853
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
The psychophysical inquiry into binocular summation.
p0388 A73-41187
Russian book - Psychological problems of activity regulation.
p0393 A73-41884
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions
p0393 A73-41887
Visual perception of relative object dimension during monocular and binocular rod equalization experiment in various visual field restriction conditions, recording eye movements and focusing characteristics
p0394 A73-41890
Effect of exercise on the response time in an identification problem
p0394 A73-41894
A model of the human in a cognitive prediction task.
p0399 A73-42223
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on speed
p0423 A73-43212
Noise blurred image recognition probability characteristics from experimental investigation, showing difference from statistical decision theory data
p0428 A73-44667
Response surface /descriptive function/ methodology design for human performance research, discussing central composite design, observations at experimental points and orthogonal blocking
p0430 A73-44773
Response surface methodology analysis of training transfer in pursuit rotor tracking task, relating three independent variables through multiple-regression prediction equations
p0430 A73-44774
Decrements in tracking and visual performance during vibration.
p0431 A73-44777
Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337
Asymmetry in perception - Attention versus other determinants.
p0435 A73-45338
Two components and two stages in search performance - A case study in visual search.
p0435 A73-45339
Effect of temporal uncertainty on human energy expenditure during moderate exercise
[AD-743726] p0594 N73-10084
Influence of illumination color, viewing distance, and turbidity on underwater vision
[AD-743756] p0595 N73-10092
Annotated bibliography on reaction times in selected human information processing tasks
[AD-745416] p0596 N73-10095
Effect of vigilance on performance of simple visual detection task
[AD-745317] p0596 N73-10097
Motion sickness effects on flying personnel performance during hurricane penetrations
[AD-743928] p0596 N73-10100
Nonlinear multiparameter control model for human operator as vehicle controller
p0597 N73-10106
Random Gaussian distribution for input noise approximation in human response tracker modeling
p0598 N73-10110
Matrix methods for dynamic modeling of human operator performance using Liapunov functions
p0598 N73-10111
Operator visual perception mapping during parameter adjustment in dynamic control system
p0600 N73-10129

Human physiological and psychological responses in long time exposure to simulated space station atmosphere as observed by critical tracking task p0601 N73-10133
Hypoxia stress effects on human operator performance in unstable tracking task using manual control p0602 N73-10138
Attention sharing effects on human operator performing simultaneously dynamic compensatory tracking control tasks p0602 N73-10140
Manual flight control and emergency procedure task skill degradation
[NASA-CR-128612] p0603 N73-10153
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073
Human recognition of contrasting target in noisy environment with diversion of attention
[FOA-2-C-2482-H5] p0611 N73-11092
Sonic boom effects on individuals compensatory tracking performance for unstable system
[UTIAS-TN-179] p0612 N73-11098
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111
Analysis of reaction time to different visual cuing methods in large displays during secondary task performance
[AD-747688] p0068 N73-12120
Effect of mood on human performance, possibility of using skin analyzer for communication, and effect of prolonged exposure to depths of 160 m on mental functioning
[JPRS-57541] p0068 N73-13072
Effect of mood on testing human performance p0069 N73-13075
Measurement of operator workload in formation processing
[NASA-CR-2150] p0070 N73-13087
Correlation of assessed maximum oxygen intake with predicted performance in running events
[AD-746867] p0071 N73-13093
Human operator model performance in tracking high performance aircraft
[AD-746725] p0072 N73-13101
Reinforcement effects on human attention and performance in continuous response to visual stimuli
[AD-747798] p0072 N73-13103
Noise and response complexity effects on human attention and performance in visual perception task
[AD-747797] p0072 N73-13105
Physiological and mental performance effects of underwater work on humans
[AD-747701] p0072 N73-13107
Cognitive functioning test to measure human performance in underwater diving stress
[AD-748036] p0072 N73-13108
Human attention and reaction performance as function of type and latency in response to signal stimulus
[AD-747801] p0073 N73-13110
Feasibility of saliva analysis for measuring mental stress in man
[AD-747671] p0073 N73-13111
Influence of time zones on physiological organs and systems and performance of athlete
[NASA-TT-F-14632] p0073 N73-13116
Bibliography on effects of underwater environment on tools, equipment, and human performance
[AD-748000] p0074 N73-13122
Computerized fast Fourier transform technique for measuring human performance in compensatory tracking task
[AD-748659] p0100 N73-14078
Human performance measurement - bibliographies
[AD-749100] p0100 N73-14080
Pupil enlargement in relation to operator stress during adaptive critical tracking task
[AD-749075] p0100 N73-14081
Simulated lunar magnetic environment effects on humans, using scotopic critical flicker frequency measurements to indicate psychophysiological stress
[AD-748193] p0101 N73-14088
Systems engineering methods for human performance enhancement in signal detection and flight control
[AD-748239] p0102 N73-14098
Criteria for selected response surface methodology design variants in human performance research
[AD-748236] p0102 N73-14099
Optimization of work-rest cycles to ensure acceptably high human performance in man machine systems
[AD-750176] p0103 N73-14107
Cyclically changing temperature effects on monitoring behavior and physiological responses of man
[AD-748451] p0104 N73-14110
Bioastronautics research, including stress effects, sensory perception, and human performance
[NASA-SP-3006] p0104 N73-15091
Capabilities and limitations of man as element in closed loop control system under normal environmental conditions p0106 N73-15107
Work, heat, and oxygen cost of various activities of man p0106 N73-15109
Prolonged bed rest and positive radial acceleration effects on human visual response time
[NASA-TN-D-7161] p0107 N73-15117
Human factors engineering to determine maximum control forces capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
Fatique effect on human visual perception
[AD-750097] p0113 N73-15171
Decision making behavior of sonar operator in target detection and reporting
[AD-750761] p0114 N73-15174
Diurnal dynamics of psychic performance during 72-hour continuous wakefulness p0135 N73-16056
Study of differences between left and right hand performance in compensatory tracking task
[RAE-TR-72117] p0141 N73-16098
Mental health services for emotional counselling in NASA facilities to insure maximum human performance p0144 N73-17062
Industrial health measures and environmental control to insure worker productivity p0146 N73-17077
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations p0148 N73-17101
Standardized performance battery for assessing effects of environmental stressors particularly noise on human performance
[NASA-CR-2149] p0148 N73-17102
Conference on operational flight stress effects on human biodynamics and performance
[AGARD-CP-101] p0188 N73-19143
Combined stress effects in human communication and motion sickness biodynamics p0188 N73-19144
Flight test program to study human factors problems and flight crew performance in military aircraft p0188 N73-19145
Combined heat, noise, and vibration effects on aircrew performance
[AMRL-TR-71-113] p0188 N73-19146
Combined noise and vibration effects on human mental and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
Human stress expenditures in operational airlift mission flights p0189 N73-19151
Human performance in sequential task training for acquisition of perceptual motor skills under flight stress p0189 N73-19153
Temperature and noise irradiation effects on human energetic metabolism during vigilance task p0189 N73-19155
Study to validate Non-Interference Performance Assessment
[NASA-CR-128865] p0190 N73-19164
Effect of briefing information on target acquisition performance of observer p0191 N73-19972

Human performance and life support engineering for space environment conditions
[AD-754216] p0224 N73-20157
Residual effects of hypnotic drugs on human nervous function and performance
p0226 N73-21106
Hashish smoking effects on human oxygen consumption during physical stress and safe driving ability
p0228 N73-21115
Spectral analysis on human biorhythmic performance to evaluate tranquilizer effects
p0228 N73-21116
Suitability of insulin dependent and oral drug dependent diabetics as navigation personnel
p0228 N73-21120
Drug effects on vision of flying personnel
p0228 N73-21121
Flight safety factors in prescribing tranquilizing drugs for flying personnel
p0228 N73-21123
Comparison of alcohol and diazepam effects on human mental and psychomotor functions
p0229 N73-21126
Systems analysis of physiological performance related to stresses such as those experienced in high performance aircraft
[AD-754970] p0230 N73-21133
Stimulating and tranquilizing drug effects on human performance indices
p0256 N73-22021
Human performance in schematic concept formation as a function of socio-economic level, personality, intelligence, and race
[AD-744781] p0260 N73-22052
Acceleration effects on human visual functions under hypoxic conditions
p0263 N73-23040
Effect of cigarette smoking on sensory perception and performance parameters of flight crews
[AD-754421] p0267 N73-23071
Probabilities models of organizational behavior and human subjective performance
[IZF-1973-3] p0268 N73-23076
Analysis of air traffic controller responses under stress conditions to show effects of accuracy, quality, and comprehensiveness of available data
p0269 N73-23714
Mathematical models for human performance in manned spacecraft control
p0270 N73-23897
Work-rest schedules for military tracking crews under prolonged vibration
p0271 N73-23986
Work-rest schedule for optimum performance of monitoring tasks
p0271 N73-23987
Effects of work-rest schedules, circadian rhythms, continuous work, and sleep loss on sustained performance
p0271 N73-23988
Biological effects of sleep deprivation, and effects of prolonged work on performance under combat conditions
p0271 N73-23989
Human visual/motor response to tracking task during long term confinement in simulated space station
[NASA-CR-2240] p0295 N73-24134
Human psychomotor and cognitive performance in humid environment
[AD-756835] p0296 N73-24142
Job attitudes of air traffic controllers
[FAA-AM-73-2] p0339 N73-27066
Effects of two sequential transatlantic flights on circadian rhythm of body function and performance
p0369 N73-27964
Effects of adverse Northern environment on human physiology and performance under military exercise conditions
[DCIEM-882] p0376 N73-29056
Improved performance of visual perception of solar patrol observers monitoring sun activity
[AD-760802] p0377 N73-29063
Subjective and physiological indicators of fatigue and performance during vigilance task
[AD-761503] p0413 N73-30077
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks
[OES-8/72] p0421 N73-31024
Sleep deprivation effects on accuracy and speed of response selection and execution
p0422 N73-31854
Scale, haze, and image motion effects on human performance in photointerpretation of aerial photography
[AD-763908] p0440 N73-32024
Combat job performance and training for air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027
Effect of human operator errors on reliability and effectiveness of his work
[AD-764937] p0441 N73-32028
Optimization of human performance in system design, training, and operation
[AD-764761] p0450 N73-33075

HUMAN REACTIONS

Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
Color effects in visual discrimination, measuring response times in letter matching task
p0588 A73-12525
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
Mathematical description of some visual inertia effects
p0060 A73-15786
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
The prediction of team monitoring performance under conditions of varied team size and decision rules.
p0081 A73-16710
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks
p0095 A73-18470
German monograph - Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability.
p0122 A73-20388
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
Interindividual differences in homomodal and heteromodal scaling of auditory and vibrotactile stimulation intensity and duration, using magnitude estimation method
p0204 A73-26750
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
Bactericide activity of the integument of man at different times of the day
p0209 A73-27716
Stimulus luminance-duration relationship of adapting light effect in human electroretinography, referring to Bunsen-Roscoe and Bloch constant law
p0237 A73-28363
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755

Manipulating the response criterion in visual monitoring.
p0247 A73-30499
Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man
p0249 A73-30845
Mental load and the measurement of heart rate variability.
p0250 A73-30881
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
Evoked negative electrical potentials due to auditory zone stimulation by local cooling, mechanical trauma and potential recording, observing reaction regeneration variations
p0276 A73-31159
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Human response to transportation noise and vibration.
p0310 A73-35328
Modeling, instrumentation and data evaluation in clinical electroretinography, discussing Fourier analysis of sinusoidal light stimulation response in normal and abnormal humans
p0310 A73-35359
A model of psychological annoyance of noise.
p0311 A73-35627
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943
Inverted posture illusion phenomenon in astronauts during weightless space flight, discussing vestibular organ function, acceleration effects and body gravitation sensing system
p0356 A73-39149
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482
Participation of cholinergic mechanisms in negative human emotions
p0362 A73-39799
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915]
p0385 A73-40863
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131
Colored aftereffects after prolonged inspection of convex lines of one color and concave lines of another color
p0389 A73-41303
Spatial frequency selectivity of a visual tilt illusion.
p0392 A73-41642
Methods for quantifying the effect of noise on people.
p0392 A73-41707
Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788
Human perception of moderate strength low frequency magnetic fields tested by whole body immersion in large Helmholtz coil field under acoustic isolation
p0392 A73-41789
Operator response to sinusoidally varying normal and emergency cycles in dynamic control task, testing anticipatory aversion response ability and error response
p0393 A73-41885
Individual physiological differences in evoked potential reactions to light sources, discussing latent periods, potential amplitude distribution and EEG measurement techniques
p0393 A73-41888
Operator reaction functional readiness manifestation in evoked potential characteristics of stimulus-response situations, obtaining response amplitude distribution
p0394 A73-41891
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705
Eigenvectors of the sensitivity variations across the human central fovea.
p0407 A73-42957
Individual personality variability difficulties in measurement of human psychophysiological reactions to flight stress, emphasizing psychological interview and evaluation methods
p0408 A73-43130
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
Human noise sensitivity, discussing personality effects, Maplin airport planning and population separation into sensitive and imperturbable groups
p0430 A73-44770
Analysis of helicopter pilot and passenger reaction to vibration environment to determine effects of discrete frequencies and combinations of harmonic frequencies
p0591 N73-10019
Analysis of physiological mechanisms contributing to occurrence of motion sickness
p0591 N73-10020
Direction-specific adaptation effects acquired by humans in slowly rotating room
[NASA-CR-129063]
p0591 N73-10062
Physiological and pathological responses of humans exposed to electricity
[NASA-CR-128422]
p0592 N73-10065
Vestibulo-ocular response of man to oscillatory rotation during sleep
[AMRU-R-70-3]
p0608 N73-11066
Vestibular function loss in man after unilateral section of eighth cranial nerve
[NASA-CR-129672]
p0070 N73-13084
Response time of flash blindness recovery in human exposure to constant energy flashes
[AD-747631]
p0071 N73-13095
Reinforcement effects on human attention and performance in continuous response to visual stimuli
[AD-747798]
p0072 N73-13103
Statistical analysis of steroid levels in parotid secretions of humans under prolonged mental stress
[AD-747682]
p0072 N73-13104
Human attention and reaction performance as function of type and latency in response to signal stimulus
[AD-747801]
p0073 N73-13110
Reaction tester for testing reaction to light stimuli
[NASA-CASE-MSC-13604-1]
p0073 N73-13114
Motion effects in pilot reactions to ground-based flight simulator display evaluation
[AD-749370]
p0075 N73-13126
Visual evoked responses from divers subjected to hyperbaric conditions simulating depths to 1200 feet breathing various gas mixtures
[AD-749325]
p0108 N73-15127
Physiological factors in human oculomotor responses to space flight stress
[DR-208-VOL-1]
p0109 N73-15136
Human semicircular canal response to rotational stimuli in yaw, pitch, and roll planes of the head
p0109 N73-15137
Anti-compensatory oculomotor response of pilot to rotational head stimuli
p0109 N73-15138
Coding data of 2565 individual human altitude chamber tests
[NASA-CR-114550]
p0136 N73-16066
Recorded observations of crew member activities during Tektite 2 underwater habitability study
[NASA-CR-130034]
p0140 N73-16094

Long term exercise effects on cardiovascular response in NASA personnel with periodic ergometric evaluation
p0145 N73-17067
Structural vibrations in aerospace operations and effects on man
p0148 N73-17099
Choice reaction tasks for discriminating individual skill potentials in information handling situations
[AD-752073] p0150 N73-17115
Measurements of endocrine metabolic responses to space flight stress on Apollo 14 and Apollo 15 crewmen
p0173 N73-18105
Unique field-laboratory methodology for assessing human response to noise
[NASA-CR-2221] p0176 N73-18124
Changes in circadian rhythm of aircraft pilot oral body temperature as result of transmeridian flights
[DLR-FB-73-01] p0178 N73-18140
Cardiovascular and respiratory systems reactions in cosmonauts during space flight
p0180 N73-19079
Effects of space flight noise intensities on human physiological functions
p0180 N73-19080
Immersion effects on human physiological motor functions
p0180 N73-19081
Human oxygen metabolism and pulmonary functions during hypodynamic water immersion
p0181 N73-19082
Transverse acceleration effects on human respiratory rate and oxygen metabolism
p0181 N73-19084
Sound, light, and proprioceptive stimuli for inhibiting vestibular illusion in man
p0181 N73-19087
Human ability to note changes in composition of inhaled air
p0182 N73-19090
Mental and cardiovascular acceleration stress effects on heart rate studied by beta adrenergic blockage
p0188 N73-19149
Role of social synchronizers in adaptation process of humans to inversion of diurnal sleep and wakefulness regime
p0218 N73-20109
Bactericidal activity of human skin at different times of day
p0218 N73-20110
Conference on human visual search and perception
[AD-754327] p0221 N73-20133
Literature review on human macular pigment absorption and density spectrum of cone receptor
[IZF-1972-17] p0264 N73-23046
Comparison of electroencephalographic response patterns in man and monkeys to visually evoked cortical stimuli
[IZF-1972-24] p0264 N73-23049
Human continuous reaction time task distribution rates for paced and selfpaced responses to visual stimuli
[IZF-1973-5] p0268 N73-23077
Human perception of musical intervals between simultaneous tones
[IZF-1972-20] p0268 N73-23078
Analysis of air traffic controller responses under stress conditions to show effects of accuracy, quality, and comprehensiveness of available data
p0269 N73-23714
Electroencephalographic and behavioral responses of humans to aircraft noise during sleep
[NASA-CR-2279] p0338 N73-27058
Job attitudes of air traffic controllers
[FAA-AM-73-2] p0339 N73-27066
Desynchronization of circadian rhythms following transmeridian flight observed in two groups of students
p0368 N73-27958
Diagnosis and prognosis of pilot reaction and tolerance to psychical stress
p0368 N73-27962
Effects of two sequential transatlantic flights on circadian rhythm of body function and performance
p0369 N73-27964
Interrelationship and reaction of human subjects to spacecraft cabin environment
[NASA-TT-F-15020] p0374 N73-29041
Medical analysis of vitamin balance among personnel of Tenth Soviet Antarctic Expedition to show effects on health and acclimatization ability
p0379 N73-29357
Analysis of human reactions to short takeoff aircraft aerodynamic noise for predicting community acceptance of short haul air service operations
p0441 N73-32960
Effect of high ambient temperature on calcium content of human bone tissue
p0444 N73-33033
Human skin reactions to lotions and distilled water during hypokinesia
p0444 N73-33034

HUMAN TOLERANCES

The second noise and social survey around Heathrow, London airport.
p0041 A73-12980
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
Direction-specific adaptation effects acquired in a slow rotation room.
p0049 A73-14154
Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Human perception of humidity under four controlled conditions.
p0089 A73-17864
Case histories of valvular cardiopathies in military pilots, determining tolerance to flight
p0115 A73-19209
Mountain inhabitants physiological characteristics due to altitude effects, investigating human tolerance and adaptation to ambient environment
p0116 A73-19212
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability
p0124 A73-20988
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog.
p0196 A73-25337
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754
High altitude aircraft cabin pressurization for crews and passengers, discussing altitude tolerance, reaction times, decompression and oxygen equipment
p0251 A73-30937
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Parachutist biomedical effects during 110-175 knot towing by aircraft, establishing maximum feasible airspeed
p0285 A73-32675
Impairment to hearing from exposure to noise.
p0287 A73-33676
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742

Tolerance to heat following cold stress.
p0325 A73-36784
Thermal comfort - New directions and standards.
p0325 A73-36785
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests
p0327 A73-36904
Human physiological responses to high speed aerial tow.
p0330 A73-36939
Tolerance to immersion in cold water
p0331 A73-36943
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
The capacity for muscular work in acute hypoxia
p0331 A73-36946
Serial correlation of physiological time series and its significance for a stress analysis
p0352 A73-38159
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation
p0356 A73-39205
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp.
p0361 A73-39791
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964
Work-heat tolerance derived from interval training.
p0400 A73-42416
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216
Biological effectiveness of microwave field and human tolerance
[JPRS-57209] p0593 N73-10073
Physiological effects of 12 submarine personnel during prolonged exposure to sonar signals at 85 db (five day exposure)
[AD-744938] p0594 N73-10087
Mathematical models for studying vestibular adaptation to stimuli in humans
[AMRU-R-70-1] p0607 N73-11062
Analysis of acceleration forces produced during aerobatic flight and effects of acceleration forces on human body
[FAA-AM-72-28] p0609 N73-11075
Human tolerance and adaptation in long term exposure to sonar signals at elevated intensities
[AD-746103] p0611 N73-11089
Hypoxia effects on human vestibular tolerance during exposure to coriolis accelerations
p0065 N73-12092
Psychobiological factors for predicting monotony tolerance and selecting personnel for isolated duty
[AD-747272] p0071 N73-13098
Biodynamic response of human head and neck to impact acceleration
[AD-747988] p0072 N73-13106
Deep diving pulmonary functions of man using different breathing gas densities
[AD-749028] p0100 N73-14082
Heat and cold stress effects in humans
p0104 N73-15094
Impact, emergency escapes, and crash survival studies
p0105 N73-15097
Human tolerance to vibration
p0105 N73-15098
Tolerance levels, physiological effects, and performance degradation during simultaneous or sequential exposures to environmental stresses
p0106 N73-15110
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147
Analysis of mechanisms of human tolerance to lower body decompression
p0135 N73-16054
Personality, occupation, and job stress effects on physiological risk factor in human coronary heart disease
p0143 N73-17054
Toxicity and safety hazard of dry beryllium copper alloy machining for human operator
p0144 N73-17059
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098
Structural vibrations in aerospace operations and effects on man
p0148 N73-17099
Airborne noise in aerospace operations and bioacoustics effects on man
p0148 N73-17100
Physical and experimental data obtained by artificial satellites for estimating extraterrestrial radiation hazard in manned space flight
[NASA-TT-F-724] p0173 N73-18098
Ionization, thermoluminescence, and nuclear photographic emulsion dosimetry for monitoring radiation loads in spacecrews during manned space flight
p0173 N73-18100
Radiobiological effects of cosmic radiation in animals and standardization of permissible radiation levels for spacecrews
p0173 N73-18102
Blockage effect in external ear canal on diver auditory perception threshold
[AD-751664] p0177 N73-18132
Hypodynamia effect on human transverse acceleration tolerance
p0181 N73-19083
Human adaptation to hypoxic hypoxia for increased resistance to physical stress
p0182 N73-19095
Human pituitary and adrenal hormone reserve in acceleration stress tolerance
p0188 N73-19150
Positive pressure breathing for increased human acceleration tolerance
p0189 N73-19156
Human adaptation to hypoxia and tolerance of high environmental temperatures
[NASA-TT-F-14860] p0219 N73-20122
Cardiac systole kinematics in humans exposed to hypoxic atmosphere
p0253 N73-21986
Low barometric pressure effects on human thermoregulation function
p0254 N73-21996
Human horizontal or antiorthostatic position effect in hypodynamic weightlessness test
p0255 N73-22011
Lower body decompression effects on cardiac cycle and human acceleration tolerance
p0263 N73-23037
Aerospace medicine research, including human tolerance to various stress factors - conferences
[AGARD-CP-110] p0265 N73-23057
Human exposure criteria to laser energy for combat use
p0266 N73-23067
Italian thermal conditions affecting acceleration tolerance and psychomotor performance of flying personnel
p0266 N73-23068
Noise effects on human hearing process and central nervous system functions
[NASA-TT-F-748] p0365 N73-27935
Diagnosis and prognosis of pilot reaction and tolerance to psychical stress
p0368 N73-27962
Respiratory function and blood acid base equilibrium in human adaptation to high altitude environment
p0372 N73-29030
Physical/mathematical analyses on human vestibular responses to acceleration stresses
p0373 N73-29033
Human hemodynamic responses and vestibular tolerances to body sway tests
p0373 N73-29034

Analysis of human reactions to short takeoff aircraft aerodynamic noise for predicting community acceptance of short haul air service operations
p0441 N73-32960

HUMAN WASTES
NT FECES
NT SWEAT
NT URINE
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239
Waste Management System overview for future spacecraft.
[ASME PAPER 73-ENAS-18] p0350 A73-37974
Collection and disposal of human wastes in aesthetic and reliable manner to prevent degradation of crew performance
p0106 N73-15111
Radiation oxidation of water impurities in moisture-containing products of human vital functions
p0134 N73-16051
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Preservatives for human urine storage and water reclamation in spacecraft cabin
p0183 N73-19099
Toxic effect of indole inhalation on man, mouse, rat, and rabbit organisms
p0183 N73-19102
Toxic effects of human exhaled air on mice organisms
p0183 N73-19103
Oxidation of atmospheric impurities in space cabin and purity of reclamated water
p0183 N73-19104
Antimicrobial water reclamation methods for processing human urine
p0183 N73-19105
Stress effects on element balance in human waste for life support recycling system
p0184 N73-19107
Biological mineralization products of human waste for autotroph cultivation
p0184 N73-19109
Hydroponic cultivation of plants on clay filters from human mineralized feces
p0184 N73-19110
Thermal combustion requirements for burner devices of human vegetative waste products
p0184 N73-19111
Antimicrobial phenyl preparations for human urine conservation during space flight
p0184 N73-19112
Cosmonaut adaptation to dehydrated food products and effects on human waste cycle
p0184 N73-19113
Reduced-gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] p0222 N73-20141
Design and test performance of space crew waste collection system
[NASA-CR-133977] p0366 N73-27945

HUMIDITY
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.
[AD-751735] p0576 A73-10163
Human perception of humidity under four controlled conditions.
p0089 A73-17864
Work-heat test comparisons of dry and wet heat and exercise programs for heat acclimatization
p0158 A73-22932
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
Thermal comfort - New directions and standards.
p0325 A73-36785
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
Sterilization parameters for spacecraft
[NASA-CR-129272] p0065 N73-12101
Human psychomotor and cognitive performance in humid environment
[AD-756835] p0296 N73-24142

HURRICANES
Motion sickness effects on flying personnel performance during hurricane penetrations
[AD-743928] p0596 N73-10100

HYDRATION
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Water load tests for determining hydration status and adrenal and kidney functions during post flight period
[NASA-TT-F-15091] p0417 N73-30998

HYDRAULIC ACTUATORS
U ACTUATORS

HYDRAULIC CONTROL
Design of electrohydraulic control system for underwater manipulator with position feedback
p0336 N73-26085

HYDRAULIC HEATING SOURCES
U HEAT SOURCES

HYDRAULIC VALVES
U VALVES

HYDRAZINES
NT METHYLHYDRAZINE
Organic and species-related differences in the action of certain hydrazine derivatives and of aminoperhydroacridine on the oxidative deamination of serotonin
p0163 A73-23679
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
Effects of intraperitoneally administered hydrazine on electrophysiology, general behavior, and performance of cats
[AD-746014] p0609 N73-11081
Hyperammonemia development in metabolic toxicity of hydrazine
[AD-749519] p0100 N73-14077

HYDROACOUSTICS
U UNDERWATER ACOUSTICS

HYDROCARBON POISONING
Oxygen, carbon monoxide, and fuel toxicity
p0105 N73-15101

HYDROCARBONS
NT CAROTENE
NT ETHYLENE
NT METHANE
NT METHYLENE
Life origin on earth, considering hydrocarbon molecules and macromolecular synthesis under earth atmospheric evolutionary conditions
p0089 A73-17928
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043

HYDROCYANIC ACID
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484

HYDROFLUORIC ACID
Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants
[AD-751438] p0139 N73-16084

HYDROGEN
NT HYDROGEN IONS
Variable photosynthetic units, energy transfer and light-induced evolution of hydrogen in algae and bacteria.
p0130 A73-21685
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972

HYDROGEN CHLORIDES
Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants
[AD-751438] p0139 N73-16084

HYDROGEN COMPOUNDS
NT HYDROCYANIC ACID

NT HYDROGEN PEROXIDE
HYDROGEN CYANIDES
U HYDROCYANIC ACID
HYDROGEN FLUORIDES
U HYDROFLUORIC ACID
HYDROGEN IONS
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads p0584 A73-11924
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction. p0169 A73-24565
HYDROGEN PEROXIDE
Hydrogen peroxide aerosols for decontamination of influenza atmosphere [NASA-TT-F-15127] p0438 N73-32006
HYDROGENATION
Cost data for modified hydrogen depolarized carbon dioxide concentrator in life support system [NASA-CR-124462] p0447 N73-33052
HYDROLYSIS
Hydrolysis of aqueous extract of lunar dust samples for identification and quantitation of amino acid precursors in extraterrestrial sources, considering prebiotic evolutionary pathways termination p0095 A73-18421
Transglucosidase activity of heart-muscle per-glucohydrolase p0125 A73-21136
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion. p0361 A73-39789
Amino acids, urea, guanidine, glycocyamine, and 5-amino 4-imidazole carboxamidine from hydrolysis of azulmic acids [NASA-TT-F-14640] p0070 N73-13089
HYDROSPHERE (EARTH)
U EARTH HYDROSPHERE
HYDROSTATIC PRESSURE
Effects of hydrostatic water bath pressure on capillary blood pressure and connective tissue dehydration [NASA-TT-F-14894] p0265 N73-23052
HYDROXYCORTICOSTEROID
NT CORTISONE
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone p0305 A73-34233
Time shift effects on human 17-hydroxy corticosteroid diurnal excretion noting transmeridian flights [DLR-FB-73-58] p0412 N73-30070
Fluorometric 11-hydroxycorticosteroid determination in human blood plasma [NASA-TT-F-15092] p0416 N73-30990
HYDROXYL COMPOUNDS
NT ALCOHOLS
NT ETHYL ALCOHOL
NT POLYVINYL ALCOHOL
Hydroxyproline determination in collagen-like plasma and urine [NASA-TT-F-15093] p0417 N73-30997
HYGIENE
Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/ [ASME PAPER 73-ENAS-26] p0350 A73-37981
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program p0143 N73-17057
Survey of industrial hygiene and safety in Air Forces operations [AD-751897] p0151 N73-17126
Dermatological testing of personal hygiene cleansing agents and laundry detergents for possible use in Skylab Program [NASA-CR-128880] p0222 N73-20143
Data analysis for predicting human personal hygienic needs during long term space flight [NASA-CR-128929] p0295 N73-24132
Analysis of microclimate of living and service quarters during Tenth Soviet Antarctic Expedition p0379 N73-29359
HYOSCINE
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus p0123 A73-20982
HYPERBARIC CHAMBERS
Cat and rat lung damage due to hyperbaric oxygen exposure and head injury, discussing alveolar surfactants, sympathetic stimulation and monkey injuries [AD-759298] p0238 A73-28507
Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man p0249 A73-30845
Exercise during hyperoxia and hyperbaric oxygenation. p0352 A73-38160
Intracellular measurements in a closed hyperbaric chamber. p0434 A73-45072
Studies concerning high pressure hyperexcitability in Squirrel Monkey [AD-745779] p0610 N73-11086
Annotated bibliography with preliminary analysis on dysbaric osteonecrosis [AD-747258] p0071 N73-13100
Metabolic implications in hyperbaric oxygen systems [AD-749381] p0103 N73-14106
Behavior of enzyme activities in blood plasma after breathing hyperbaric oxygen [DLR-FB-71-96] p0112 N73-15163
Hyperbaric chamber used to determine influence of increased ambient pressure and gas density on cardiac rate in man [AD-755129] p0261 N73-22058
Extreme aeroembolism case and successful therapy in hyperbaric chamber p0368 N73-27959
Influence of He, N2, and N2O environments on physiological parameters of rats p0371 N73-29019
Muscle force transducer to detect tremors in divers under hyperbaric conditions [AD-763343] p0438 N73-32010
HYPERCAPNIA
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia. p0583 A73-11502
Augmentation of chemosensitivity during mild exercise in normal man. p0080 A73-16610
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles p0084 A73-16735
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man. p0094 A73-18348
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability p0124 A73-20988
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia p0126 A73-21322
Quantitative influence of CO2 inhalation on thermal sweating in man. p0195 A73-25331
Method of PaCO2 determination in men with functional disorders of external respiration p0239 A73-29075
Ventilatory responses to transient hypoxia and hypercapnia in man. p0275 A73-31126
Plasma electrolytes, pH, and ECG during and after exhaustive exercise. p0278 A73-31347
Correlation of ventilatory responses to hypoxia and hypercapnia. p0359 A73-39776
Ventilatory and hemodynamic responses to acute hypoxia and hypercapnia in Hereford calf, comparing with man p0360 A73-39782
Sodium pentobarbital effects on albino rats in normocapnic and chronically hypercapnic conditions [AD-751234] p0187 N73-19142
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes

[AD-749323] p0258 N73-22035
Toxicological aspects of carbon dioxide exposure in chronic hypercapnia
[AD-753394] p0418 N73-31005

HYPEROXIA
Studies of blood gas analysis at abnormal environment.
p0582 A73-11210
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria.
p0117 A73-19483
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability
p0124 A73-20988
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Development and reversibility of pulmonary oxygen poisoning in the rat.
p0247 A73-30516
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
Protein synthesis in lung - Recovery from exposure to hyperoxia.
p0323 A73-36653
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Hyperoxia effects on elimination of carbon monoxide, ammonia, ketones, and aldehydes by rats
p0063 N73-12077
Oxygen, carbon monoxide, and fuel toxicity
p0105 N73-15101
Hyperoxic damage in animal cells, tissues, and organs
p0182 N73-19091
Hyperoxic morphological changes in connective rat tissues
p0182 N73-19092
Effect of hypoxia and hyperoxia on rate of blood deoxygenation, and influence of antioxidants in mice
p0216 N73-20096
Hyperoxic atmosphere effect on rat metabolism and elimination of gaseous wastes
p0254 N73-22004
Biophysical properties of human red blood cells exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125
Mechanisms of oxygen toxicity at cellular level
[AD-758725] p0299 N73-25124
Epinephrine oxidation and indole production during high pressure oxygen poisoning
[AD-759405] p0339 N73-27061
Effects of oxygen pressure on tissues under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065
Course of infectious process and functional activity of pulmonary macrophages in mice confined to atmosphere with high oxygen content
p0442 N73-33016
Mechanism of inert gas narcosis in human body and mice
[NASA-CR-62096] p0445 N73-33038

HYPERPNEA
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499

HYPERTENSION
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction.
p0201 A73-26287
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
Coronary atherosclerosis development and prevention in children, discussing hyperlipidemia, hypertension, cigarette smoking and high risk identification
p0243 A73-30065
Prevention of the atherosclerotic diseases - Opportunities for military medicine.
p0248 A73-30518
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655
Circadian rhythm change study of transmeridian flight and medication effects on mildly hypertensive subject
[AD-743300] p0595 N73-10090
Arterial hypertension symptoms in flying personnel
p0253 N73-21991

HYPERTHERMIA
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
Physical work induced hyperthermia effects on detection rate in visual vigilance task performance in hot and humid environment
p0095 A73-18469
Portable electronic thermometer for temperature measurement during exercise elevation of body temperature in heat acclimatization experiment
p0169 A73-24567
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711

Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp.
p0361 A73-39791
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature.
p0390 A73-41438
Change in content of gases in blood when man is exposed to high ambient temperatures
p0217 N73-20105

HYPERTONIA
U OSMOSIS
HYPERTROPHY
U GROWTH
HYPERVELOCITY IMPACT
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485

HYPERVENTILATION
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude.
p0042 A73-13500
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies
p0193 A73-25041
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752
Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence
p0343 A73-37197
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068
Ventilation at transition from rest to exercise.
p0436 A73-45375

HYPERVOLEMIA
Renin-angiotension system in simulated hypervolemia induced by immersion
[NASA-TT-F-14885] p0258 N73-22036

HYPOBARIC ATMOSPHERES
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525
Electrogastrographic data pertinent to exposures in a pressure chamber to moderate hypoxia levels
p0087 A73-17684
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0155 A73-22537
Human and male Charles River rat exposures to Halon 1301 under hypobaric conditions, simulating aircraft compartment
[AD-747958] p0066 N73-12106
Low barometric pressure effects on human thermoregulation function
p0254 N73-21996
Biophysical properties of human red blood cells exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072
Respiratory function and blood acid base equilibrium in human adaptation to high altitude environment
p0372 N73-29030

HYPODYNAMIA
Biological effects of lasting hypodynamia on young albino rats in 62 day confinement, considering weight, growth and sexual behavior
p0124 A73-20983
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Effect of prolonged hypodynamia on rat biology
p0134 N73-16050
Medical and biological problems of manned space flight
[NASA-TT-F-7191] p0180 N73-19077
Weightlessness and hypodynamia effects on bodily functions during space flight
p0180 N73-19078
Hypodynamia effect on human transverse acceleration tolerance
p0181 N73-19083
Human hydroxycorticosteroid and aldosterone excretions during hypodynamic space flight conditions
p0373 N73-29031

HYPOGLYCEMIA
Antidiabetic medications and aircrew
p0128 A73-21541
Hypoglycemia in airline pilots.
p0326 A73-36790
Liquid retention in chlorpropamide therapy and water intoxication of patients
[NASA-TT-F-14597] p0609 N73-11077

HYPOKINESIA
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Water and salt metabolism in hypokinesia-subjected animals
p0207 A73-27704
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation
p0208 A73-27713
Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Protein and nucleic acid contents in animal tissues under hypokinesia
p0279 A73-31503
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/
p0279 A73-31504
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide
p0280 A73-31519
Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues
p0314 A73-35983
Prolonged space flight and hypokinesia.
p0325 A73-36789
Functional state of the auditory analysor under conditions of prolonged clinostatic hypokinesia
p0425 A73-43789
Effect of prolonged hypokinesia on the higher nervous activity of humans

p0428 A73-44668
Effect of hypokinesis of varying duration on fluid-electrolyte metabolism and composition in blood and tissues of animals
p0216 N73-20098
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high-mountain conditions
p0217 N73-20107
Latent coronary insufficiency detection in flying personnel using barochamber loading
p0253 N73-21988
Dystrophic degeneration of suprarenal rat cortex during hypokinesia
p0254 N73-22003
Hypokinetic disturbances of rats after exposure to carbon monoxide
p0255 N73-22007
Long term hypokinesia effect on rats hemodynamic system
p0262 N73-23026
Long term hypokinesia effect on protein and nucleic acid content in rat tissue
p0262 N73-23027
Depressing effect of hypokinesia on rat skeletal muscle functions
p0262 N73-23028
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
Tolerance of hypokinetic rats to carbon monoxide exposure
p0264 N73-23043
Blood supply to skeletal muscles of rats during hypokinesia
p0442 N73-33018
Fluid-electrolyte balance during 120-day bed rest
p0443 N73-33028
Elimination of creatinine in urine during prolonged hypokinesia
p0444 N73-33029
Human skin reactions to lotions and distilled water during hypokinesia
p0444 N73-33034
Using lower body negative pressure to prevent decrease in volume of circulating plasma during hypokinesia
p0444 N73-33036
Functional disturbances during hypokinesia in man [NASA-TT-F-15148]
p0450 N73-33073

HYPOTENSION

Airline flight and ground personnel fatigue and orthostatic hypotension syndrome manifested by variations in retinal arterial pressure and brain circulation
p0586 A73-12156
Mechanisms of certain functional shifts during change in the blood of the content level of external pancreatic-gland secretion components
p0081 A73-16700

HYPOTHALAMUS

Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151
Structural organization and electrophysiological properties of the intercentral functional systems of the hypothalamic region of the brain
p0581 A73-11024
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects
p0088 A73-17770
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Brain calcium - Role in temperature regulation.
p0353 A73-38294
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600
Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601
Russian book - Role of the hypothalamus and the limbic system of the brain in regulating vegetative functions.
p0382 A73-40276
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation
p0382 A73-40282
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769
Hypothalamus as internal heat regulator for warm-blooded animals [NASA-TT-F-15138]
p0437 N73-32002

HYPOTHERMIA

Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation
p0047 A73-13824
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels.
p0077 A73-16151
Cerebral circulation alteration during hypothermia
p0081 A73-16698
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975
Nitrogen metabolite dynamics in the brain during repeated hypothermia and subsequent spontaneous warming
p0207 A73-27703

Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc
p0406 A73-42862
Hypothermy effects on drug actions in physiological rabbit functions
p0212 N73-20064
Dynamics of nitrogenous cerebral metabolites accompanying repeated hypothermia and subsequent self-heating
p0216 N73-20097

HYPOTHESES
NT NULL HYPOTHESIS

HYPOVENTILATION
Human respiration under increased pressures.
p0205 A73-26924
External airway resistance effects on ventilation and carbon dioxide response during human steady state exercise
p0400 A73-42417
Submaximal exercise with increased inspiratory resistance to breathing.
p0400 A73-42419

HYPOVOLEMIA
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524

HYPOXEMIA
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781
Analysis of arterial hypoxemia caused by pulmonary malfunctions and regulation of oxygen during exercise and rest
[AD-746979] p0071 N73-13092
Human adaptation to hypoxic hypoxia for increased resistance to physical stress
p0182 N73-19095
Human arterial elasticity during breathing of reduced partial oxygen atmosphere
p0253 N73-21987

HYPOXIA
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude.
p0042 A73-13500
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525
Electrogastrographic data pertinent to exposures in a pressure chamber to moderate hypoxia levels
p0087 A73-17684
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects
p0088 A73-17770
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
Learning ability of rats to regulate hypoxic ambient atmosphere by instrumental response, discussing motivation and reinforcement factors
p0095 A73-18439
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
Russian book - Tissue, oxygen in the presence of extremal flight factors.
p0116 A73-19425
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
Assessment of hypoxia in the human heart.
p0118 A73-19928
The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929
Time course of pulmonary vascular response to hypoxia in dogs.
p0120 A73-20168
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere
p0123 A73-20979
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction.
p0169 A73-24565
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Hemodynamics alteration caused by acute hypoxia in animals with denervated carotid sinuses
p0236 A73-28350
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534

Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Exogenous free fatty acid effects on hypoxic myocardial function in isolated isometric rat papillary muscles
p0241 A73-29572
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers
p0248 A73-30519
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide
p0280 A73-31519
Relative rates of arterial lactate and oxygen-deficit accumulation in hypoxic dogs.
p0281 A73-31922
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121
Influence of hypoxia on the release of certain gaseous wastes in white rats
p0304 A73-34228
Cobalt compound administration effects on hypoxic stress control, testing polycythemic response and cobalt retention in rats
p0307 A73-34744
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations.
p0310 A73-35460
Activity variations of some renal enzymes during stepwise increased hypoxia
p0323 A73-36582
Intellectual performance during prolonged exposure to noise and mild hypoxia.
p0325 A73-36783
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests
p0327 A73-36904
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
The capacity for muscular work in acute hypoxia
p0331 A73-36946
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2.
p0359 A73-39777
Ventilatory and hemodynamic responses to acute hypoxia and hypercapnia in Hereford calf, comparing with man
p0360 A73-39782
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
Effect of certain flight factors on crew efficiency
p0383 A73-40350
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses
p0409 A73-43132
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549
Simulated high altitude determination of interrelation of systematic and cellular responses to acute and chronic hypoxia
[AD-743536] p0594 N73-10081
Hypoxia stress effects on human operator performance in unstable tracking task using manual control
p0602 N73-10138
Hypoxia effects on human gastric motor functions in pressure chamber experiments using electrogastrography
p0064 N73-12085
Hypoxia effects on human vestibular tolerance during exposure to coriolis accelerations
p0065 N73-12092
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134
Thermoregulation reactions of rats in hypoxic atmosphere with nitrogen and helium dilution
p0134 N73-16046
Effects of hypoxia and acceleration stresses on enzyme activities in erythrocytes and blood plasma
[DLR-FB-72-71] p0137 N73-16070
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Hypoxia adaptation of rats for increased resistance to toxic atmospheric gases
p0183 N73-19100
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Hypoxia and reduced acceleration tolerance of rats after injection of cysteamine radioprotector
p0211 N73-20058
Pathophysiological response reactions of rats to acute hypoxia after injection of cysteamine and aminothiol group radioprotector
p0211 N73-20059
X ray effect on animal resistance to anoxic, anemic, and histotoxic hypoxia
p0215 N73-20087
Effect of hypoxia and hyperoxia on rate of blood deoxygenation, and influence of antioxidants in mice
p0216 N73-20096

Dynamics of some characteristics of induced potential of optical region in cerebral cortex in rabbits with increasing hypoxia
p0217 N73-20103
Human adaptation to hypoxia and tolerance of high environmental temperatures
[NASA-TT-F-14860] p0219 N73-20122
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature
[NASA-TT-F-14861] p0219 N73-20123
Myocardial changes in flying personnel exposed to hypoxic hypoxia
p0253 N73-21985
Cardiac systole kinematics in humans exposed to hypoxic atmosphere
p0253 N73-21986
Evoked compensatory reflex reactions of rabbit ocular and eyelid muscles during hypoxia
p0253 N73-21992
Hemoglobin and erythrocyte increase in rat adaptation to hypoxic hypoxia
p0255 N73-22005
Altitude acclimatization period effects on rat resistance to hypoxia
p0255 N73-22006
Nutrient protein intake of rats and tolerance to acute hypoxia
p0263 N73-23035
Acceleration effects on human visual functions under hypoxic conditions
p0263 N73-23040
Cardiopulmonary adaptations of man to moderately high altitude
[AD-755192] p0267 N73-23075
Hypoxia effects on release of gaseous wastes from rat vital functions
p0372 N73-29025
Role of respiratory enzymes on human adaptation to hypoxia
[NASA-TT-F-15058] p0411 N73-30060
State of blood filling and bioelectric activity of brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic vascular dysfunction
p0443 N73-33027

I

IDENTIFYING
Differential light scattering patterns for identifying different species of bacteria
p0147 N73-17090
IGNITERS
NT INITIATORS (EXPLOSIVES)
IGNITION
Initiator ignition effect in laboratory glass and polythene vessel studying dummy hand injuries during simulated accidents
[ERDE-TRANS-1] p0295 N73-24137
ILLUMINANCE
Extended border enhancement during intermittent illumination - Binocular effects.
p0308 A73-34842
Illuminance and albedo variations /whiteness constancy/ category judgments for stimuli with unpatterned and patterned surfaces
p0388 A73-41183
ILLUMINATING
A human factors approach to lighting recommendations and standards.
p0083 A73-16730
ILLUMINATION
The effect of illumination level, stroke width and figure ground on legibility of NAMEL numbers.
p0083 A73-16729
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses
p0160 A73-23308
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
ILLUSIONS
NT OCULOGRAVIC ILLUSIONS
ILS (LANDING SYSTEMS)
U INSTRUMENT LANDING SYSTEMS
IMAGE CONTRAST
Some differences among figural aftereffects, apparent motion, and paracontrast.
p0578 A73-10435
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Influence of border and background on perception of straightness.
p0585 A73-12081
Psychophysical effects of night vision perceptual contrast in terms of central visual receptive field organization
p0046 A73-13759
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection
p0046 A73-13762
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions
p0046 A73-13764
Axiomatic mathematical model for human visual edge contrast based on additivity, one-dimensionality and contrast continuity parameters
p0060 A73-15788
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Vernier alignment acuity task accuracy related to retinal image line position location, noting effect of high contrast grating background
p0120 A73-20159
Random dot pattern luminance and contrast effects on limiting inter-stimulus interval for visual apparent motion masking by bright field
p0120 A73-20256
Contrast and assimilation effects analysis based on receptive field models of vertebrate retinal function
p0123 A73-20812
Eye dominance measurement relationship to image sharpness or visual acuity from binocular and monocular tests, obtaining dominance normal distribution
p0153 A73-21893
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716
The effects of edge sharpness and exposure duration on detection threshold.
p0204 A73-26718
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100
Evoked potentials to changes in the chromatic contrast and luminance contrast of checkerboard stimulus patterns.
p0236 A73-28355
Subjective brightness contrast lack of correlation with steady state evoked potential amplitude in suprathreshold stimuli range
p0275 A73-31017
Choice of optimal light characteristics for marks in optical sighting devices
p0306 A73-34241
Visual acuity dependence on background brightness, object contrast, pupil diameter and visual time lag
p0306 A73-34639
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies.
p0308 A73-34839
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
Spatial characteristics of chromatic induction - The segregation of lateral effects from straylight artefacts.
p0346 A73-37419
Stimulus specificity in the human visual system.
p0407 A73-42960

Noise blurred image recognition probability characteristics from experimental investigation, showing difference from statistical decision theory data
p0428 A73-44667
A mathematical model for controlled image contour sharpness enhancement
p0432 A73-44907
Relationship between intermediate medium, and transformation and contrast phenomena
[NASA-TT-F-15035] p0376 N73-29055

IMAGE CONVERTERS
NT IMAGE TUBES

IMAGE CORRELATORS
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance
p0450 N73-33631

IMAGE ENHANCEMENT
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
A mathematical model for controlled image contour sharpness enhancement
p0432 A73-44907
Subjective tests of target acquisition time using television with image enhancement possibilities
[MBB-UFE-892-72-O] p0113 N73-15165

IMAGE TUBES
An instrument panel on an image tube in color
p0128 A73-21543

IMAGERY
NT AERIAL PHOTOGRAPHY
NT CHRONOPHOTOGRAPHY
NT CINEMATOGRAPHY
NT COLOR PHOTOGRAPHY
NT ELECTRON PHOTOGRAPHY
NT HOLOGRAPHY
NT INFRARED PHOTOGRAPHY
NT RADAR IMAGERY
NT RADIOGRAPHY

IMAGES
NT AFTERIMAGES
NT RETINAL IMAGES

IMAGING TECHNIQUES
NT IMAGE ENHANCEMENT
NT RADAR IMAGERY
Optical properties of vertebrate eyes.
p0161 A73-23312
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface
p0312 A73-35804
A study of the statistical patterns of visual perception of a black and white raster image
p0385 A73-40861
Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation
p0389 A73-41216
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance
p0450 N73-33631

IMBLMS
Development of procedures of identification of microorganisms on orbiting spacecraft
[NASA-CR-128747] p0186 N73-19132

IMMERSION
U SUBMERGING

IMMOBILIZATION
Organ and body mass changes in restrained and fasted domestic fowl.
p0057 A73-14975
The effect of prolonged immobilization on diuresis and water intake in rats.
p0203 A73-26489
The effect of immobilization on body fluid volume in the rat.
p0358 A73-39487
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624

IMMUNITY
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism
p0281 A73-31875
Effect of chronic irradiation of dogs by Co60 gamma rays on level of autoantibodies
p0216 N73-20100
Prodromal disease - Immune responses of host macrophage system to humoral factors
[NASA-CR-133455] p0365 N73-27938

IMMUNOLOGY
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
Russian book on auto-antibodies of X ray irradiated animal and human blood and organisms covering cell formation, isolation, preparations, sickness treatment and auto-immune reactions
p0060 A73-15711
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure
p0087 A73-17685
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
Reactivity and certain metabolic indices during prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729
Automated procedures for Passive Immune Agglutination system
[NASA-CR-128731] p0149 N73-17107
Immunological effectiveness of X ray irradiation on histocompatibility of mice skin transplants
p0255 N73-22008
Functional state of lymphoid cell in peripheral blood of astronauts and immunoreactivity of individual astronants after space flight
[NASA-TT-F-15089] p0418 N73-30999

IMPACT
NT HYPERVELOCITY IMPACT

IMPACT ACCELERATION
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Biodynamic response of human head and neck to impact acceleration
[AD-747988] p0072 N73-13106
Impact acceleration effects on rabbit central nervous system
p0372 N73-29024

IMPACT DAMAGE
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485

IMPACT DECELERATION
U DECELERATION
U IMPACT ACCELERATION

IMPACT LOADS
Impact on a simple physical model of the head.
p0170 A73-24770
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429

IMPACT PRESSURES
U IMPACT LOADS

IMPACT RESISTANCE
Impact resistance of crash helmets for agricultural aviation pilots
[ARL/SM-NOTE-390] p0420 N73-31014

IMPACT SENSITIVITY
U IMPACT RESISTANCE

IMPACT TESTS
Impact, emergency escapes, and crash survival

studies
p0105 N73-15097
Anthropometry for protective equipment evaluation and human impact acceleration experiments
p0266 N73-23066
IMPEDANCE
NT ACOUSTIC IMPEDANCE
NT ELECTRICAL RESISTANCE
NT MECHANICAL IMPEDANCE
NT RESPIRATORY IMPEDANCE
IMPERMEABILITY
U PERMEABILITY
IMPLANTATION
Hazard and interference avoidance in implant telemetry, discussing leakage currents, muscle interference, magnetic influence, high frequency noise, electrode and respiratory artifacts, etc
p0054 A73-14295
Surgically implanted single and multichannel telemetry systems for monitoring single and multiple physiological parameters, discussing size and power requirements
p0054 A73-14302
A remotely operated ECG telemeter for chronic implantation in rats.
p0054 A73-14303
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
Implantable transducer for in vivo measurement of bone strain.
p0206 A73-27443
Unified approach to biomechanics of dental implantology
p0191 N73-19977
Chemical and orthopedic properties of ceramic bone implants in monkeys
[AD-754982] p0221 N73-20134
IMPLEMENTATION
U PERFORMANCE
IN-FLIGHT MONITORING
Verification program for Inflight Blood Collection system
[NASA-CR-128645] p0067 N73-12112
Ionization, thermoluminescence, and nuclear photographic emulsion dosimetry for monitoring radiation loads in spacecrews during manned space flight
p0173 N73-18100
Development of quality monitoring system for water recovery cycle in weightlessness environment
[NASA-CR-112267] p0222 N73-20144
IN-FLIGHT THRUST MEASUREMENT
U IN-FLIGHT MONITORING
INACTIVATION
U DEACTIVATION
INCOMPRESSIBLE FLUIDS
NT MICROPOLAR FLUIDS
INDEXES (DOCUMENTATION)
Russian book - Biomedical problems of space flights: Index of domestic and foreign literature.
p0062 A73-16034
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861
Annotated bibliography and indexes on aerospace medicine and biology for 1961 to 1965
[NASA-TT-F-14662] p0265 N73-23053
Sixth supplement to bibliography on planetary quarantine with indexes
[NASA-CR-131817] p0297 N73-25112
INDEXES (RATIOS)
NT MORPHOLOGICAL INDEXES
INDICATING INSTRUMENTS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT HOT-FILM ANEMOMETERS
NT POSITION INDICATORS
NT RADIO DIRECTION FINDERS
NT TACHOMETERS
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857
Biological indicators and the effectiveness of sterilization procedures.
p0288 A73-33692
Psychophysiological aspects in flight personnel visual perception of image indicator
p0373 N73-29035
INDOLES
NT TRYPTOPHAN
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
Toxic effect of indole inhalation on man, mouse, rat, and rabbit organisms
p0183 N73-19102
INDUCED FLUID FLOW
U FLUID FLOW
INDUSTRIAL MANAGEMENT
NT PERSONNEL MANAGEMENT
Industrial work rhythm and between-day fluctuation studies 1920-1969, emphasizing industrial record and between-day fluctuations
p0287 A73-33160
Precoronary care and sudden death prevention due to coronary disease in industrial workers
p0146 N73-17084
INDUSTRIAL PLANTS
Industrial model for leave and overtime taking behavior of employees exposed to peak work activity periods in relation to health, demography, and job variables
p0143 N73-17055
INDUSTRIAL SAFETY
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
Russian book - safety measures in aviation industry.
p0312 A73-35869
Application of pneumatically controlled prosthetic arm to industrial handling problems
[NASA-TT-F-14628] p0073 N73-13115
Survey of industrial hygiene and safety in Air Forces operations
[AD-751897] p0151 N73-17126
INDUSTRIES
NT AEROSPACE INDUSTRY
NT AIRCRAFT INDUSTRY
Industrial health measures and environmental control to insure worker productivity
p0146 N73-17077
Medical services of operating environmental health program for industrial workers
p0147 N73-17093
INELASTICITY
U ELASTIC PROPERTIES
INERT GASES
U RARE GASES
INERTIA
Instrumentation and techniques for determining effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119
INERTIAL ACCELEROMETERS
U ACCELEROMETERS
INERTIAL FORCES
U INERTIA
INFARCTION
NT MYOCARDIAL INFARCTION
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319
INFECTIONS
U INFECTIOUS DISEASES
INFECTIOUS DISEASES
NT INFLUENZA
NT SMALLPOX
NT SYPHILIS
NT TUBERCULOSIS
Remote sensing application to habitat of mosquito vectors of disease, considering St. Louis and Venezuelan encephalitis strains and human filariasis
p0363 A73-39866

Luciferase ATP assay procedure for determining bacterial infections in urinary tract
[NASA-CR-130797] p0173 N73-18096
Management of asymptomatic carriers of hepatitis associated antigen in Hellenic Air Force personnel
p0265 N73-23060
Meteorological conditions and infection of upper respiratory tract in children
[NLL-M-22866-(5828.4F)] p0297 N73-25109
Prodromal disease - Immune responses of host macrophage system to humoral factors
[NASA-CR-133455] p0365 N73-27938

INFLATABLE DEVICES
U INFLATABLE STRUCTURES

INFLATABLE STRUCTURES
NT GAS BAGS
Development and characteristics of inflatable airbag restraint system for use in general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127

INFLUENZA
Hydrogen peroxide aerosols for decontamination of influenza atmosphere
[NASA-TT-F-15127] p0438 N73-32006

INFORMATION DISSEMINATION
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861

INFORMATION MANAGEMENT
Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778
Interactive information system with application in medical area
[NASA-TM-X-66076] p0604 N73-10156

INFORMATION SYSTEMS
Sorcerer apprentice head mounted display with wand for interaction with computer generated synthetic objects, describing creation of illusory three dimensional environment
p0344 A73-37323
Curriculum development and personnel training for information centers
p0297 N73-24205
Ergonomic control system information models
p0414 N73-30082

INFORMATION THEORY
Information theory mathematical models applied to different visual function activity phases, covering Shannon and Fisher probability models, Shreider semantic theory and Kolmogorov algorithm
p0060 A73-15784
Transinformation and real time identification applied to the study of pilot workload
p0085 A73-17195
Spatial information coding in the human visual system - Psychophysical data.
p0309 A73-35240
The mechanisms of the occurrence of emotional stress in man.
p0328 A73-36920
Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337

INFORMATION TRANSFER
U COMMUNICATING

INFORMATION TRANSMISSION
U DATA TRANSMISSION

INFRARED DETECTORS
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976

INFRARED INSTRUMENTS
NT INFRARED DETECTORS

INFRARED LASERS
Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097
IR laser radiation eye protector
[AD-753080] p0178 N73-18142
Retinal damage in monkeys exposed to near infrared gallium arsenide laser pulses
[AD-753419] p0221 N73-20135

INFRARED MASERS
U INFRARED LASERS

INFRARED PHOTOGRAPHY
Color and color infrared aerial photographic detection of Dutch elm disease
p0297 N73-25110

INFRARED RADIATION
Spectral emissivity of skin and pericardium.
p0427 A73-44213
Compilation of data concerning effects of infrared radiation on eye
[NASA-CR-128407] p0591 N73-10064

INFRARED SPECTROSCOPY
Quantitative evaluation of superficial organic contaminants, soluble in halogenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis
p0096 A73-18547
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685

INFRASONIC FREQUENCIES
Influence of infrasound on human body functions
p0147 N73-17085

INGESTION (BIOLOGY)
NT DRINKING
Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] p0101 N73-14093

INGESTION (ENGINES)
Wind tunnel tests to determine structural integrity of birds under conditions simulating ingestion of birds into inlets of high speed aircraft
[NASA-TM-X-68163] p0106 N73-15114

INHABITANTS
NT MOUNTAIN INHABITANTS

INHALATION
U RESPIRATION

INHIBITION
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
Bioelectrical activity differentiations in cat cortex during sleep inhibition
p0257 N73-22026

INHIBITION (PSYCHOLOGY)
Inhibitive mechanisms activity in behavior control by neostriatum, discussing suppressive reactions, evoked sleep, conditioned and instrumental reflexes and neurophysiological aspects
p0581 A73-11025
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625

INHIBITORS
Photosensitized inhibitor formation in isolated, aging chloroplasts.
p0122 A73-20453
Phenol preservative for reducing toxic urine outgassing into air environment
p0183 N73-19098

INITIATORS (EXPLOSIVES)
Initiator ignition effect in laboratory glass and polythene vessel studying dummy hand injuries during simulated accidents
[ENDE-TRANS-1] p0295 N73-24137

INJECTION
Techniques for microinjection of biologically active substances into subcortical structures of the brain
p0322 A73-36574

INJURIES
NT BACK INJURIES
NT BAROTRAUMA
NT BRAIN DAMAGE
NT BURNS (INJURIES)
NT CRASH INJURIES
NT EJECTION INJURIES
NT FROSTBITE
NT LESIONS
NT NOISE INJURIES
NT PARALYSIS
NT PULMONARY LESIONS
NT RADIATION INJURIES
Defined shock wave effects on miniature swine, describing organ injuries
p0369 N73-27965

INOCULATION
Automatic surface inoculation of agar trays.
p0155 A73-22550
Automatic inoculating device for agar trays using cotton swab or loop
[NASA-CASE-LAR-11074-1] p0141 N73-16096
INORGANIC COMPOUNDS
NT AMMONIA
INORGANIC PEROXIDES
NT HYDROGEN PEROXIDE
INORGANIC SULFIDES
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
INSECTS
NT BEES
NT DROSOPHILA
NT LARVAE
NT TRIBOLIA
The structural organization of the compound eye in insects.
p0160 A73-23302
Investigation of oribatid mites found in Antarctic regions during Tenth Soviet Antarctic Expedition
p0379 N73-29349
INSENSITIVITY
U SENSITIVITY
INSPECTION
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
INSTRUCTIONS
U EDUCATION
INSTRUCTORS
Flight personnel training meetings, covering decision making, cockpit personnel selection and instructor role analysis
p0041 A73-13073
INSTRUMENT COMPENSATION
NT TEMPERATURE COMPENSATION
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509
INSTRUMENT ERRORS
Influence of elastic properties of human body on arterial blood pressure measurement
p0099 N73-14072
INSTRUMENT LANDING SYSTEMS
Alcohol induced performance degradation in pilot instrument approach landings
p0227 N73-21113
Human factors in design of aircraft in-flight monitoring and automatic landing system for low weather operation
p0270 N73-23901
INSULATING MATERIALS
U INSULATION
INSULATION
NT THERMAL INSULATION
Insulated electrode for electrocardiographic recording without paste electrolyte
[NASA-CASE-MSC-14339-1] p0232 N73-21151
INSULIN
Antidiabetic medications and aircrew
p0128 A73-21541
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622
Suitability of insulin dependent and oral drug dependent diabetics as navigation personnel
p0228 N73-21120
INTEG MED AND BEHAVIORAL LAB MEASUR SYSTEM
U IMBLMS
INTEGRAL TRANSFORMATIONS
NT FOURIER TRANSFORMATION
INTEGRATED CIRCUITS
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on speed
p0423 A73-43212
Ultrasonic marine biotelemetry transmitter utilizing metal oxide semiconductor integrated circuits
[AD-748605] p0074 N73-13119
Artificial intelligence in integrated circuit control of bionic manipulators
[NASA-CR-131403] p0224 N73-20156
INTEGRATION (REAL VARIABLES)
U MEASURE AND INTEGRATION
INTELLECT
Intellectual ability and performance on a non-verbal problem-solving task.
p0044 A73-13553
INTELLIGENCE
NT ARTIFICIAL INTELLIGENCE
NT INTELLECT
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298
Extraterrestrial intelligent life existence possibility in terms of hypothesis involving earth as wilderness area or zoo with failure of interaction with other civilization
p0428 A73-44554
Human performance in schematic concept formation as a function of socio-economic level, personality, intelligence, and race
[AD-744781] p0260 N73-22052
INTELLIGIBILITY
NT SPEECH RECOGNITION
INTENSIFICATION
U AMPLIFICATION
INTERCRANIAL CIRCULATION
Xenon 133 measurement of cerebral volumetric circulation rates during papaverin and intensain vasodilation of canine and feline intercranial vessels, showing vessel resistance reduction
p0239 A73-29074
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
INTERFACES
Interface requirements for design and development of Physiology of Chimpanzees in Orbit experiment
[NASA-CR-131397] p0220 N73-20130
INTERFERENCE GRATING
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418
INTERNATIONAL LAW
NT SPACE LAW
INTERPLANETARY FLIGHT
Psychological stresses and crew compatibility during interplanetary spacecraft flight
[JPRS-57878] p0106 N73-15113
Effects of planetary quarantine constraints on advanced planetary mission planning
[NASA-CR-130861] p0176 N73-18123
INTERPLANETARY PROPULSION
U INTERPLANETARY SPACECRAFT
INTERPLANETARY SPACECRAFT
NT VIKING LANDER SPACECRAFT
NT VIKING ORBITER SPACECRAFT
Control equipment for sterilization facility used to thermally inactivate microbes on interplanetary space vehicle components
[NASA-CR-131103] p0185 N73-19122
Planning and source allocation for planetary quarantine measures for interplanetary automated spacecrafts
[NASA-CR-131291] p0220 N73-20126
Dry heat inactivation of atypical Bacillus subtilis var. niger spores in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
INTERPOLATION
A method for the investigation of interpolated information and time effects in short term retention.
p0096 A73-18475
INTERSTELLAR MATTER
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080
INTERSTITIALS
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.

p0056 A73-14649

INTERVALS
Human perception of musical intervals between simultaneous tones
[IZF-1972-20] p0268 N73-23078

INTESTINES
NT RECTUM
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle.
p0385 A73-41130
Pharmacologic investigations of antagonistic effects of pyridines on isolated guinea pig ileum
[BMVG-FBWT-72-14] p0138 N73-16075
Effect of accelerations on active transport of glucose in small intestine of rats
p0442 N73-33021

INTOXICATION
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501

INTRACRANIAL CAVITY
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572

INTRACRANIAL PRESSURE
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300

INTRAOCULAR PRESSURE
Ocular tonus measurements for glaucoma detection in flying personnel, discussing subsequent test procedures in case of abnormal findings
p0586 A73-12158
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514
Patterns of diurnal variation in the intraocular pressure of airline pilots.
p0355 A73-39107
Ocular tension in flying personnel
p0383 A73-40347
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661
Weight, blood pressure, and intraocular pressure in young healthy males prior to and after 50-km walk
[NASA-TT-F-14557] p0608 N73-11071
Long term bed rest effects on human retinal blood circulation and intraocular pressure
p0263 N73-23038

INTRAVASCULAR SYSTEM
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534

INTRAVEHICULAR ACTIVITY
Astronaut manual performance limits in intravehicular Skylab environment
[NASA-CR-128590] p0603 N73-10150
Guidelines for extravehicular and intravehicular activities during space shuttle operation with emphasis on contingency situations - Vol. 2
[NASA-CR-133992] p0419 N73-31007
Pressure suit requirements and characteristics for space shuttle personnel performing EVA and IVA activities - Vol. 3
[NASA-CR-133993] p0419 N73-31008
Requirements and equipment for space shuttle emergency intravehicular activity and effectiveness of emergency procedures - Vol. 5
[NASA-CR-133995] p0419 N73-31010
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] p0439 N73-32012

INTRAVENOUS PROCEDURES
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160

INVALIDITY
U ERRORS

INVERSIONS
NT CENTRIFUGING STRESS
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511

INVERTEBRATES
NT ARTEMIA
NT ARTHROPODS
NT BEES
NT CRABS
NT DROSOPHILA
NT INSECTS
NT LARVAE
NT SPORES
NT TRIBOLIA
NT WORMS
Light evoked responses in invertebrate photoreceptor cells, considering cell organization, microvilli, lateral eye of Limulus, generator potentials, visual responses, etc
p0160 A73-23307

INVESTIGATION
NT AIRCRAFT ACCIDENT INVESTIGATION

INVISIBILITY
U VISIBILITY

INVOLUNTARINESS
U INVOLUNTARY ACTIONS

INVOLUNTARY ACTIONS
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893

IODINE COMPOUNDS
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760

ION BEAMS
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181

ION CONCENTRATION
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads
p0584 A73-11924
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction.
p0169 A73-24565

ION CURRENTS
Ionic current mechanisms for cardiac muscle repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies
p0197 A73-25593
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport
p0197 A73-25594

ION DENSITY (CONCENTRATION)
NT PROTON DENSITY (CONCENTRATION)
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685

ION EXCHANGE MEMBRANE ELECTROLYTES
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in

cold-exposed hamsters
p0156 A73-22649
ION EXCHANGE RESINS
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
ION EXCHANGING
Cation exchange binding of rubidium and cesium by rat liver cell microsomes.
p0588 A73-12549
ION IRRADIATION
NT PROTON IRRADIATION
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments
p0398 A73-42183
Heavy ion irradiation effects on bacteria mutations in balloon flight and accelerator experiments, comparing with cosmic rays
p0399 A73-42184
IONIC CONDUCTIVITY
U ION CURRENTS
IONIC MOBILITY
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174
IONIZATION
NT ATMOSPHERIC IONIZATION
IONIZATION CHAMBERS
NT PROPORTIONAL COUNTERS
IONIZATION COUNTERS
U RADIATION COUNTERS
IONIZED GASES
NT CATIONS
NT CHARGED PARTICLES
NT SOLAR WIND
IONIZING RADIATION
NT COSMIC RAYS
NT GAMMA RAYS
NT PRIMARY COSMIC RAYS
NT ULTRAVIOLET RADIATION
NT X RAYS
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
Russian book - Primary and initial processes of the biological action of radiation.
p0312 A73-35896
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Penetrating ionizing space radiations with diversity in energy range of both particulate and electromagnetic components
p0105 N73-15100
Physiology of depressed metabolic states and gastrointestinal responses to ionizing radiation [NASA-CR-130381]
p0133 N73-16038
Effects of ionizing radiation and space flight conditions on microorganisms, plants, animals, enzymes, and immunological preparations
p0173 N73-18103
Hand book on ionizing radiation protection policies at Kennedy Space Center [NASA-TM-X-69410]
p0186 N73-19133
Influence of light flashes from heavy ionizing particles on astronaut nervous system [LBL-1011]
p0186 N73-19134
Radioresistance recovery rate with combined exposure to ionizing radiation and dynamic factors (vibration and acceleration)
p0214 N73-20080
Radiation sterilization with Van de Graaff accelerators [NASA-TT-F-14821]
p0219 N73-20120
Lithium fluoride thermoluminescent dosimeter for measuring ionizing radiation exposure during Apollo 16 flight
p0292 N73-24115
IONOSPHERIC ABSORPTION
U ELECTROMAGNETIC ABSORPTION
IONS
NT CATIONS
NT CESIUM ION
NT FERRIC IONS
NT HEAVY IONS
NT HYDROGEN IONS
NT METAL IONS
NT MOLECULAR IONS
IP (IMPACT PREDICTION)
U COMPUTERIZED SIMULATION
IRASERS
U INFRARED LASERS
IRON
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399
IRON COMPOUNDS
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
IROQUOIS HELICOPTER
U UH-1 HELICOPTER
IRRADIANCE
NT ILLUMINANCE
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342
IRRADIATION
NT ION IRRADIATION
NT NEUTRON IRRADIATION
NT PROTON IRRADIATION
NT X RAY IRRADIATION
Research on biological effects of microwave radiation [MBL-1972-5]
p0591 N73-10060
Radiation oxidation of water impurities in moisture-containing products of human vital functions
p0134 N73-16051
Effect of chronic irradiation of dogs by Co60 gamma rays on level of autoantibodies
p0216 N73-20100
Influence of monochromatic light on physiological processes of blood [NASA-TT-F-14941]
p0297 N73-25111
IRRITATION
NT TOXICITY AND SAFETY HAZARD
ISCHEMIA
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
Relationship of anginal symptoms to lung mechanics during myocardial ischemia.
p0589 A73-12820
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541
P wave of electrocardiogram in early ischaemic heart disease.
p0048 A73-13892
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value.
p0059 A73-15521
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches.
p0115 A73-19152
Assessment of hypoxia in the human heart.
p0118 A73-19928
The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929
Coronary atherosclerosis and ischemic myocardial damage.
p0320 A73-36538
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545

Responsibility for ischemic cardiopathies in civil aviation flight personnel p0327 A73-36902
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors p0404 A73-42828
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization p0405 A73-42835
Ischemic polarcardiographic changes induced by exercise - A new criterion. p0432 A73-44946
Relationship between peaks of cosmic radiation and ischemic heart disease [NASA-TT-F-14992] p0334 N73-26065

ISING MODEL
U MATHEMATICAL MODELS

ISLANDS
NT GREAT BRITAIN
NT JAPAN

ISOCHROMATICS
Dichromatic convergence points obtained by subtractive colour matching. p0346 A73-37420

ISOCYANATES
Isocyanide spin label for studying conformational transitions in cytochrome c, emphasizing heme group [NASA-TT-F-14623] p0065 N73-12099

ISOLATION
NT SOCIAL ISOLATION
Sensory versus perceptual isolation - A comparison of their electrophysiological effects. p0247 A73-30517

ISOLATORS
NT VIBRATION ISOLATORS

ISOMORPHISM
Effect of the information panel structure on operator activity p0394 A73-41889

ISOPYCNIC PROCESSES
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation. p0318 A73-36503

ISOSTERIC PROCESSES
U ISOPYCNIC PROCESSES

ISOTOPE EFFECT
Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping p0095 A73-18417

ISOTOPE SHIFT
U ISOTOPE EFFECT

ISOTOPES
NT CALCIUM ISOTOPES
NT COBALT 60
NT PLUTONIUM 238
NT POTASSIUM ISOTOPES
NT RADIOACTIVE ISOTOPES
NT SODIUM 24

ISOTOPIC LABELING
The study of biological macromolecules using perturbed angular correlations of gamma radiation. p0589 A73-12648
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits. p0054 A73-14301
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times. p0057 A73-14767
Oxidation effects on rate of C 14-labeled leucine incorporation into rat skeletal muscle protein p0077 A73-16152
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice p0123 A73-20977
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint p0166 A73-23943
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus p0168 A73-24520
Binding of Melatonin to human and rat plasma proteins. p0170 A73-24657
Xenon 133 measurement of cerebral volumetric circulation rates during papaverin and intensain vasodilation of canine and feline intercranial vessels, showing vessel resistance reduction p0239 A73-29074
Protein synthesis in lung - Recovery from exposure to hyperoxia. p0323 A73-36653
Measurement of cardiac output with and organ trapping of radioactive microspheres. p0324 A73-36661
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands. p0348 A73-37757
Video instrumentation for radionuclide angiocardiography. p0348 A73-37796
Biosynthesis of RNA in the brain cortex during various functional states p0389 A73-41262
Measurement of coronary blood flow by radiocardiography - Study of 116 cases. p0405 A73-42838
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews p0174 N73-18106

ISOTROPIC MEDIA
Experimental determination of shear moduli in a compact bone tissue p0045 A73-13742

ISOTROPY
NT ISOTROPIC MEDIA

ITALY
Italian thermal conditions affecting acceleration tolerance and psychomotor performance of flying personnel p0266 N73-23068

J

JAPAN
Anthropometric data of Japanese Air Self-Defense Force personnel p0101 N73-14091

JARRING
U MECHANICAL SHOCK

JEEPS
U AUTOMOBILES

JET AIRCRAFT
NT A-7 AIRCRAFT
NT BOEING 720 AIRCRAFT
NT C-135 AIRCRAFT
NT CONCORDE AIRCRAFT
NT F-4 AIRCRAFT
Jet procedures trainer for pilot transition from straight wing propeller plane to swept wing jets, discussing pilot instruction and selection p0275 A73-31095
Performance decrement and response time of current and noncurrent jet Naval pilots [AD-761463] p0421 N73-31025

JET AIRCRAFT NOISE
Effects of aircraft noise on human sleep. p0096 A73-18546
Research in aircraft noise and sonic booms reduction, remote sensing of water pollution, and earth surface changes [DLR-MITT-72-15] p0232 N73-21153
Analysis of human reactions to short takeoff aircraft aerodynamic noise for predicting community acceptance of short haul air service operations p0441 N73-32960

JET FLIGHT
U JET AIRCRAFT

JET NOISE
U JET AIRCRAFT NOISE

JET PILOTS
U AIRCRAFT PILOTS

JOINTS (ANATOMY)
NT ELBOW (ANATOMY)
NT KNEE (ANATOMY)

German monograph - Experimental investigation of the structure of joint movements in the range of motions of the arms and of the entire body, giving attention to a presentation in a man-related basic system.
p0047 A73-13812
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision
p0092 A73-18164
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328
Nonlinear model relating neural input to force and muscle contraction in human ankle joint
p0599 N73-10117
Synchronization kinetics in control of movement links in human extremities
p0336 N73-26089

JUDGMENTS
Effect of simulated sonic booms and overpressure on EEG waveform patterns and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066

JUPITER (PLANET)
Spacecraft microbial burden reduction for Jupiter due to atmospheric entry heating
[NASA-CR-132072] p0292 N73-24117

JUPITER ATMOSPHERE
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100

K

KC-135 AIRCRAFT
U C-135 AIRCRAFT

KETONES
NT PENTANONE
Methylisobutylketone causing lesions in first and second sections of proximal convoluted tubule of nephron of kidney
[AD-751444] p0139 N73-16083
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128

KIDNEY DISEASES
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination.
p0194 A73-25136
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
Methylisobutylketone causing lesions in first and second sections of proximal convoluted tubule of nephron of kidney
[AD-751444] p0139 N73-16083

KIDNEYS
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours
p0123 A73-20978
Fibrinolytic activity of urine in healthy persons
p0276 A73-31165
Morphological changes in kidneys during exposure to variously oriented accelerations at a level of 4 g for many hours
p0304 A73-34226
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
Morphological changes in juxtaglomerular apparatus in kidneys of rats during multihour exposure to accelerations in different directions
p0133 N73-16045
Morphological changes in rat kidneys exposed to different accelerations
p0372 N73-29023
Water load tests for determining hydration status and adrenal and kidney functions during post flight period
[NASA-TT-F-15091] p0417 N73-30998

KINEMATICS
NT BODY KINEMATICS
Cardiac systole kinematics in humans exposed to hypoxic atmosphere
p0253 N73-21986
Volumetric kinematic analysis on servomechanism of remote handling manipulator
p0335 N73-26075
Matrix method for analyzing kinematics of spatial mechanisms for manipulators
p0335 N73-26077
Manipulator kinematics in selecting geometrical shapes of containers and chambers
p0336 N73-26087
Screw calculus in kinematic and power analyses on spatial positions of manipulator link mechanisms
p0336 N73-26092

KINESTHESIS
U PROPRIOCEPTION

KINETIC THEORY
NT TRANSPORT THEORY

KINETICS
NT REACTION KINETICS
Synchronization kinetics in control of movement links in human extremities
p0336 N73-26089

KIRCHHOFF-HELMHOLTZ FLOW
U PIPE FLOW

KIRCHHOFF-HUYGENS PRINCIPLE
U WAVE PROPAGATION

KNEE (ANATOMY)
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint
p0166 A73-23943

KNOWLEDGE
NT PHILOSOPHY

KREBS CYCLE
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122

KRONECKER PRODUCT
U ORTHOGONALITY

L

LABORATORIES
NT HUMAN FACTORS LABORATORIES
NT LUNAR RECEIVING LABORATORY
NT MANNED ORBITAL LABORATORIES

LABORATORY EQUIPMENT
Self-scanning chromatographic-fluorographic drug detector with optical readout system
[NASA-CASE-ARC-10633-1] p0259 N73-22048

LABYRINTH
NT COCHLEA
NT VESTIBULES
The neuronal mechanism of nystagmus.
p0316 A73-36437
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146
Comparison of development of auditory vesicle in frog embryos under weightless and terrestrial conditions
[NASA-TT-F-14624] p0592 N73-10072
Analysis of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026

LABYRINTHECTOMY
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus
p0123 A73-20982
Guinea pigs used to determine effect of intramuscular injections of drugs on fall-out and Bekhterev nystagmus occurring after unilateral and bilateral labyrinthectomies
p0134 N73-16049

LACTATES
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122
Relative rates of arterial lactate and oxygen-deficit accumulation in hypoxic dogs.

p0281 A73-31922
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131
Lactate origins and renewal in blood plasma, considering metabolism, enzymatic resynthesis and final excretion in urine
p0434 A73-45157
Complete activity of lactate dehydrogenase and isoenzymes in plasma and myeloid cells
[NASA-TT-F-14586] p0592 N73-10070
Use of Ringers lactate solution in pre- and postoperative fluid therapy
[NASA-TT-F-14600] p0592 N73-10071

LACTIC ACID
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156

LADDERS
Ladderail and ergometry - A comparative summary.
p0194 A73-25183

LAG (DELAY)
U TIME LAG

LAKES
Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes
p0096 A73-18577

LAND MANAGEMENT
Environmental factors and cost problems of selecting optimum sanitary landfill site for solid waste disposal
[NASA-CR-128744] p0189 N73-19157

LAND USE
Environmental factors and cost problems of selecting optimum sanitary landfill site for solid waste disposal
[NASA-CR-128744] p0189 N73-19157
Water reclamation and waste disposal technology applied to land use and aerospace engineering
[NASA-CR-128857] p0190 N73-19158
Waste disposal and water reclamation technology for land use and aerospace engineering application
[NASA-CR-128858] p0190 N73-19159

LANDFORMS
NT MOUNTAINS

LANDING
NT AIRCRAFT LANDING
NT CRASH LANDING
NT DITCHING (LANDING)
NT MARS LANDING
NT PLANETARY LANDING
NT SPACECRAFT LANDING

LANDING AIDS
NT APPROACH INDICATORS
NT INSTRUMENT LANDING SYSTEMS
Perceptual considerations for a wide field of view, helicopter night landing system /HENILAS/.
p0081 A73-16705

LANDING INSTRUMENTS
NT APPROACH INDICATORS

LANDING SIMULATION
Magnetic data tapes containing measurements of pilot scanning behavior, control response and vehicle response during simulated instrument landing approaches
p0600 N73-10124
Development and characteristics of six degree of freedom, fast time predictor model for simulation of F-4 aircraft landing on aircraft carrier
[AD-750294] p0103 N73-14102

LANDING SYSTEMS
U LANDING AIDS

LANGUAGES
NT WORDS (LANGUAGE)

LANTHANIDE SERIES METALS
U RARE EARTH ELEMENTS

LARVAE
Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress
p0291 N73-24106

LARYNX
Functional reactions of human otorhinolaryngolic organs during hypokinesia
p0256 N73-22015

LASER OUTPUTS
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light.
p0581 A73-10973
Deficits in visual function associated with laser irradiation.
p0169 A73-24563
Spectral deficits in visual acuity due to laser irradiation
[AD-750394] p0114 N73-15173
Retinal damage in monkeys exposed to near infrared gallium arsenide laser pulses
[AD-753419] p0221 N73-20135
Atmospheric effects on laser propagation and impact on eye safety
[AD-755405] p0259 N73-22044
Human exposure criteria to laser energy for combat use
p0266 N73-23067

LASERS
NT ARGON LASERS
NT GALLIUM ARSENIDE LASERS
NT GAS LASERS
NT INFRARED LASERS
NT PULSED LASERS
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation
p0356 A73-39205
Physical and functional performance properties of laser safety goggles
[AD-746208] p0606 N73-10170
Transmission characteristics of commercially available, laser eye protectors with Cary 14 spectrophotometer
[AD-746293] p0612 N73-11100
Test evaluation of laser protective visors for flight crews
[AD-751470] p0142 N73-16102
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
Optical density properties of ocular glass laser protective filters
[AD-755406] p0261 N73-22057
Performance of hadron laser safety eyeshields in protecting personnel from accidental ocular exposure to common laser radiation
[AD-759921] p0337 N73-26099

LATENCY
U REACTION TIME

LATITUDE
NT GEOMAGNETIC LATITUDE

LATTICES (MATHEMATICS)
NT BOOLEAN ALGEBRA

LAUNCHERS
NT CATAPULTS

LAUNCHING
NT ROCKET LAUNCHING

LAUNCHING BASES
NT CAPE KENNEDY LAUNCH COMPLEX

LAW (JURISPRUDENCE)
NT SPACE LAW

LEAD (METAL)
X ray fluorescence analysis for determining lead content of paint on pencils in Goddard supply system
p0148 N73-17097

LEAD POISONING
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128

LEARNING
NT ASTRONAUT TRAINING
NT CONDITIONING (LEARNING)
NT HABITUATION (LEARNING)
NT TRANSFER OF TRAINING
Low body temperature effects on learned behavior retention under hibernation conditions in squirrels
p0078 A73-16324
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Interference of 'attend to and learn' tasks with tracking.

p0353 A73-38377
Effects of direct auditory feedback of electromyogram on learning to control single unit [AD-745107] p0605 N73-10165
LEARNING MACHINES
Interactive aspects of man/learning system control teams. p0081 A73-16708
Automaton synthesis and perceptron learning for controlled objects classification according to unknown features, noting adaptive relationships between retina and associative elements p0119 A73-20047
The control of a manipulator by a computer model of the cerebellum. p0344 A73-37333
LEAVES
Remote detection of water content and spectral properties of leaves in different soybean crop species p0068 N73-13070
Reflectance, transmittance and absorbance spectra of normal and six types of maize leaves [NASA-CR-130032] p0136 N73-16065
Spectral characteristics of normal and nutrient-deficient maize leaves [NASA-CR-132145] p0293 N73-24119
Scattering of polarized light by rough and smooth leaf surfaces p0378 N73-29333
LEG (ANATOMY)
NT KNEE (ANATOMY)
Angular measurements of foot motion for application to the design of foot-pedals. p0580 A73-10773
Telemetry of venous blood pressure at rest and at muscle activity during running. p0053 A73-14290
The interaction between muscle groups in a complex motor act in humans p0125 A73-21320
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man p0401 A73-42658
LEGENDRE CODE
U COMPUTER PROGRAMMING
LEGIBILITY
The effect of illumination level, stroke width and figure ground on legibility of NAMEL numbers. p0083 A73-16729
LENSES
NT CONTACT LENSES
LESIONS
NT PULMONARY LESIONS
Cerebral localization of speech, discussing cortical lesions, aphasia and mental activity correlation theories p0126 A73-21425
Residual visual function after brain wounds involving the central visual pathways in man. p0287 A73-33218
Frontal eye-field lesions in monkeys. p0317 A73-36446
Hepatic lesions observed among flight crews following aviation accidents p0330 A73-36933
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease. p0405 A73-42829
Lesions of nervous system and vascular embolisms in decompression sickness [AD-743330] p0593 N73-10076
Methylisobutylketone causing lesions in first and second sections of proximal convoluted tubule of nephron of kidney [AD-751444] p0139 N73-16083
LETHALITY
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure p0288 A73-33695
Daylight and disinfectant effects on bacteria survival times on plastic surfaces [NASA-TT-F-13923] p0592 N73-10069
Energy comparisons for lethal doses of gamma radiation and visible light with energy of basal cell metabolism [AD-746750] p0072 N73-13102
Influence of shielding head and anterior stomach on course of radiation sickness in dogs subjected to total lethal gamma irradiation p0213 N73-20073
LETHARGY
Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc p0406 A73-42862
LETTERS (SYMBOLS)
U SYMBOLS
LEUCINE
Oxidation effects on rate of C 14-labeled leucine incorporation into rat skeletal muscle protein p0077 A73-16152
Protein synthesis in lung - Recovery from exposure to hyperoxia. p0323 A73-36653
LEUKOCYTES
NT EOSINOPHILS
NT LYMPHOCYTES
LEUKOPENIA
Leukopenic response of dog bone marrow for evaluating hematopoietic tissue function p0255 N73-22009
LEVEL (QUANTITY)
NT EFFECTIVE PERCEIVED NOISE LEVELS
LIAPUNOV FUNCTIONS
Matrix methods for dynamic modeling of human operator performance using Liapunov functions p0598 N73-10111
LIFE (BIOLOGY)
U LIFE SCIENCES
LIFE (DURABILITY)
NT SERVICE LIFE
NT STORAGE STABILITY
LIFE DETECTORS
Biological, chemical and cytological methods of microorganism detection integrated into single instrument p0056 A73-14320
Extrasolar life in light of stars, planets, and living systems nuclear, gravitational, electromagnetic and weak interactions p0078 A73-16306
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products. p0202 A73-26479
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface p0312 A73-35804
LIFE RAFTS
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658
LIFE SCIENCES
NT MOLECULAR BIOLOGY
The origin of life problem - A brief critique. p0089 A73-17927
Life origin on earth, considering hydrocarbon molecules and macromolecular synthesis under earth atmospheric evolutionary conditions p0089 A73-17928
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972. p0395 A73-42158
Extraterrestrial intelligent life existence possibility in terms of hypothesis involving earth as wilderness area or zoo with failure of interaction with other civilization p0428 A73-44554
Conservational and rational use of natural resources and wildlife to preserve biosphere environment [JPRS-58429] p0222 N73-20145
State and prospects of biogeocenological research [JPRS-59395] p0338 N73-27053
LIFE SPAN
Abstracts on microwave radiation effects on human and animal physiological functions and life expectancy

[NBL-1972-6] p0591 N73-10061
LIFE SUPPORT SYSTEMS
NT BIOPAKS
NT CLOSED ECOLOGICAL SYSTEMS
NT EMERGENCY LIFE SUSTAINING SYSTEMS
NT UNDERWATER BREATHING APPARATUS
Progress in the development of the reverse osmosis process for spacecraft wash water recovery. p0584 A73-11993
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products p0124 A73-20984
Russian book on mathematical models of biological systems covering biogeocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems p0154 A73-22347
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system p0306 A73-34240
Advanced methods of recovery for space life support systems. p0347 A73-37711
Nuclear submarine atmospheric constituent monitoring, covering mass spectrometers, IR carbon monoxide sensors, system development, requirements testing and spacecraft applications [ASME PAPER 73-ENAS-9] p0349 A73-37970
Waste Management System overview for future spacecraft. [ASME PAPER 73-ENAS-18] pG350 A73-37974
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management [ASME PAPER 73-ENAS-22] p0350 A73-37978
Space Shuttle Orbiter Environmental Control and Life Support System for atmosphere revitalization, crew life support, thermal conditioning and airlock support [ASME PAPER 73-ENAS-23] p0350 A73-37979
Nutrition systems for pressure suits. p0355 A73-39105
Supply, biosynthetic, and regenerated physico-chemical systems for spacecraft life support [NASA-TT-F-14436] p0604 N73-10155
Long-term testing of water electrolysis systems for regenerative life support system in manned space stations [NASA-CR-128629] p0612 N73-11095
Factors relevant to respiratory support and equipment design p0105 N73-15102
Cost effectiveness of water reclamation subsystem in advanced aerospace life support systems [NASA-CR-124098] p0177 N73-18134
Medical and biological problems of manned space flight [NASA-TT-F-719] p0180 N73-19077
Preservatives for human urine storage and water reclamation in spacecraft cabin p0183 N73-19099
Human performance and life support engineering for space environment conditions [AD-754216] p0224 N73-20157
Cost analysis of oxygen supply equipment and recovery systems for orbital space stations [NASA-CR-124175] p0230 N73-21137
Evaluation of hazardous conditions created by facial hair on aircrew personnel wearing oxygen masks [AD-754075] p0232 N73-21154
Hydrogen depolarized cell for removing CO2 in spacecraft life support systems [NASA-CR-131868] p0259 N73-22047
Effectiveness of phased dilution compared to current demand diluter oxygen delivery system p0266 N73-23065
Temperature and humidity control in air quality modeling for optimal life support system of spacecraft cabin p0294 N73-24131
Water recovery system for three man crew aboard spacecraft [NASA-CR-128983] p0337 N73-26094
Biological development of human living environment [NASA-TT-F-15005] p0339 N73-27067
Cryogenic heat exchanger for removal of waste heat from spacecraft environmental control life support system [NASA-CR-124301] p0340 N73-27071
Cost estimating method for life support systems of manned earth orbital programs [NASA-CR-124305] p0340 N73-27072
Cost analysis of oxygen recovery subsystems for life support systems [NASA-CR-124304] p0340 N73-27075
Cost analysis of mass spectrometers and gas chromatographs for life support atmosphere monitoring [NASA-CR-124306] p0341 N73-27076
Personnel life support clothing for protection against environmental hazards [AD-762428] p0370 N73-27976
Aerospace medicine and exobiology research in support of long term manned space flight [JPRS-59702] p0371 N73-29021
Equipment requirements for space shuttle EVA/IVA pressure suit, life support system, mobility aids, vehicle support provisions, and emergency support [NASA-CR-133991] p0414 N73-30089
Space shuttle environmental and thermal control/life support system [NASA-CR-134009] p0415 N73-30091
Requirements for mobility aids and restraint devices for use by personnel of space shuttle - Vol. 4 [NASA-CR-133994] p0419 N73-31009
Requirements and equipment for space shuttle emergency intravehicular activity and effectiveness of emergency procedures - Vol. 5 [NASA-CR-133995] p0419 N73-31010
Alkali metal carbonate-bicarbonate solid gas reaction for removing CO2 from atmosphere of EVA life support system [NASA-CR-114661] p0420 N73-31013
Intra- and extravehicular life support space suite for Apollo astronauts [NASA-CASE-MSC-12609-1] p0439 N73-32012
Electrochemical system with solid electrolyte for regenerating oxygen from CO2 and H2O p0441 N73-33015
Light and carbon dioxide effects on algal life support systems in space flight [NASA-CR-135796] p0445 N73-33039
LIFEBOATS
Operational investigation of combined all weather capabilities of Coast Guard motor lifeboat and 70 knot surface effect rescue vehicle [AD-761460] p0370 N73-27974
LIFT DISTRIBUTION
U FORCE DISTRIBUTION
LIGHT (VISIBLE RADIATION)
NT LIGHT BEAMS
NT POLARIZED LIGHT
NT TWILIGHT GLOW
The structure and reactions of visual pigments. p0160 A73-23306
Visual acuity as a function of exposure duration. p0165 A73-23838
Daylight and disinfectant effects on bacteria survival times on plastic surfaces [NASA-TT-F-13923] p0592 N73-10069
Dynamics of some characteristics of induced potential of optical region in cerebral cortex in rabbits with increasing hypoxia p0217 N73-20103
Light flash observation experiments conducted by Apollo 16 astronauts - Part C p0233 N73-21763
Light effects on organic matter balance of oak underwood growing in forest understory p0378 N73-29330
LIGHT ABSORPTION
U ELECTROMAGNETIC ABSORPTION
LIGHT ADAPTATION
Axiomatic formulation of a mathematical model for visual adaptation p0579 A73-10655
Scotopic vision - An unexpected threshold elevation produced by dark annuli. p0585 A73-12080

Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli p0120 A73-20257

Neural channel mechanism for real light and equivalent background coding, using test flashes under bleaching and field adaptation p0121 A73-20258

Mitotic activity in dorsal epidermis of Rana pipiens. p0122 A73-20456

Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms p0162 A73-23317

Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay p0162 A73-23319

Electroretinogram recovery cycle during light adaptation and after dark adaptation p0168 A73-24518

Single unit and evoked potential responses in cat optic tract to paired light flashes. p0198 A73-25647

Light adaptation of the late receptor potential in the cat retina. p0236 A73-28352

Stimulus luminance-duration relationship of adapting light effect in human electroretinography, referring to Bunsen-Roscoe and Bloch constant law p0237 A73-28363

Flashblindness recovery following exposure to constant energy adaptive flashes. p0238 A73-28505

Influence of the dazzling of an eye on the state of adaptation of the congeneric eye in a normal subject p0245 A73-30388

Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation. p0346 A73-37413

Eigenvectors of the sensitivity variations across the human central fovea. p0407 A73-42957

Influence of illumination on electro-oculographic measurements of human eye potential [AMRD-R-71-1] p0607 N73-11064

Response time of flash blindness recovery in human exposure to constant energy flashes [AD-747631] p0071 N73-13095

LIGHT AIRCRAFT

Binaural processing of speech intelligibility in light aircraft [FAA-AM-72-31] p0102 N73-14094

Effects of light aircraft noise on hearing [NASA-CR-130987] p0173 N73-18095

LIGHT ALLOYS
NT BERYLLIUM ALLOYS

LIGHT BEAMS

Light beam attenuation in suspensions of algae p0378 N73-29325

LIGHT DURATION
U FLASH
U PULSE DURATION

LIGHT EMISSION
NT BIOLUMINESCENCE
NT CHEMILUMINESCENCE
NT ELECTROLUMINESCENCE
NT FLUORESCENCE
NT LUMINESCENCE
NT X RAY FLUORESCENCE

Influence of light flashes from heavy ionizing particles on astronaut nervous system [LBL-1011] p0186 N73-19134

LIGHT INTENSITY
U LUMINOUS INTENSITY

LIGHT MODULATION

On the approximation of the optical modulation transfer function /MTF/ by analytical functions. p0121 A73-20264

Design of light modulator for generation of periodic visual stimuli [AD-754562] p0223 N73-20149

LIGHT PRESSURE
U ILLUMINANCE

LIGHT PROBES
U LIGHT BEAMS

LIGHT SCATTERING

Localized electroretinography capable of maintaining constant light scattering with small angular dimensions by employing Ulbricht principle of uniformly illuminated sphere p0308 A73-34963

Differential light scattering patterns for identifying different species of bacteria p0147 N73-17090

Scattering of polarized light by rough and smooth leaf surfaces p0378 N73-29333

Effect of various parameters on long range underwater vision for narrow and broad beam illumination p0450 N73-33630

LIGHT TRANSMISSION
NT LIGHT SCATTERING

Transmission characteristics of commercially available, laser eye protectors with Cary 14 spectrophotometer [AD-746293] p0612 N73-11100

Effect of various parameters on long range underwater vision for narrow and broad beam illumination p0450 N73-33630

LIGHTING
U ILLUMINATING

LIGHTING EQUIPMENT
NT FLASH LAMPS

Optimal lighting for visual tasks, discussing color, type, transillumination, crossed polarization, brightness patterns, diffuse reflection and surface shadowgraphing p0247 A73-30498

Design, development, and evaluation of airport lighting control panel for airport traffic control towers [FAA-RD-72-93] p0066 N73-12108

LIGNIN

The evolution of lignin - Experiments and observations. p0241 A73-29649

LIMBS (ANATOMY)
NT ARM (ANATOMY)
NT ELBOW (ANATOMY)
NT FOREARM
NT HAND (ANATOMY)
NT KNEE (ANATOMY)
NT LEG (ANATOMY)

Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151

Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics p0096 A73-18474

Modification of a ballisto-oscillograph for extremities p0157 A73-22865

Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus p0199 A73-26087

Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses p0322 A73-36578

Human sensorimotor coordination following space flights. p0397 A73-42170

Climbing and cycling with additional weights on the extremities. p0400 A73-42418

Feasibility of limb controlled astronaut maneuvering scheme p0339 N73-27063

LIMNOLOGY

Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes p0096 A73-18577

LINEAR PREDICTION

Predictive display with continuous parameter tracking for quasi-linear model of human pilot transfer function in closed loop system

p0599 N73-10120
LINEAR SYSTEMS
A model of the human in a cognitive prediction task.
p0399 A73-42223
LING-TEMCO-VOUGHT AIRCRAFT
NT A-7 AIRCRAFT
LING-TEMCO-VOUGHT MILITARY AIRCRAFT
U MILITARY AIRCRAFT
LINGUISTICS
NT WORDS (LANGUAGE)
LINKAGES
Screw calculus in kinematic and power analyses on spatial positions of manipulator link mechanisms
p0336 N73-26092
LIPID METABOLISM
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value.
p0059 A73-15521
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Diurnal rhythm oscillations of fat metabolism indices in healthy young men
p0117 A73-19646
Thermal factor and dehydration influences on protidic and lipidic catabolisms of young men with partial food deprivation in hot climate, discussing metabolic balances
p0125 A73-21248
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta
p0193 A73-25042
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells
p0197 A73-25591
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Serum cholesterol and plasma lipid elevation separation of hypercholesterolemic patients for atherosclerosis therapy
p0320 A73-36533
Energy supply in acute cold-exposed dogs.
p0324 A73-36655
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787
Mechanisms of hyperlipidaemias in different clinical conditions.
p0405 A73-42832
Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671
LIPIDS
NT LIPOPROTEINS
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599
Lipids in arteriosclerotic arterial tissues of man.
p0320 A73-36534
Effects of Apollo 12 lunar materials on lipid levels, including fatty acids and sterols, of tobacco tissue and slash pine cultures
[NASA-CR-128606] p0591 N73-10063
Blood lipid diagnostic and therapeutic measures to prevent heart disease in humans
p0145 N73-17073
Absorption of bile acids and cholesterol by polymers
p0191 N73-19976
LIPOPROTEINS
Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease.
p0408 A73-42975
Blood lipid diagnostic and therapeutic measures to prevent heart disease in humans
p0145 N73-17073
LIQUEFIED GASES
NT LIQUID OXYGEN
LIQUID BREATHING
Design and performance of demand regulated liquid breathing systems for mammalian respiration
p0252 N73-21976
LIQUID COOLING
Comparative study of patches for liquid cooled garments.
p0345 A73-37404
Automatic temperature controller for liquid cooled garment based on total evaporative water loss during exercise
[NASA-TN-D-7311] p0299 N73-25126
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] p0330 N73-26071
Cooling effects on human tolerance to work induced heat stress and collapse
[NASA-CR-134059] p0438 N73-32005
LIQUID DYNAMICS
U FLUID DYNAMICS
LIQUID FILLED SHELLS
Impact on a simple physical model of the head.
p0170 A73-24770
LIQUID FLOW
NT WATER FLOW
LIQUID OXYGEN
Cryogenic insulation of liquid oxygen dewars for aircraft pilot breathing masks
[AD-763325] p0421 N73-31026
LIQUID-GAS MIXTURES
NT AEROSOLS
LIQUIDS
NT LIQUID OXYGEN
NT ORGANIC LIQUIDS
LITERATURE
Marine biology literature compilation for Caribbean Sea and adjacent regions
p0261 N73-23022
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023
Microbiological experiments aboard balloons, rockets, and earth satellites - literature review
p0262 N73-23025
Literature review on human macular pigment absorption and density spectrum of cone receptor
[IZF-1972-17] p0264 N73-23046
LITHIASIS
Renal lithiasis among civil operating aircrew
p0127 A73-21536
Renal lithiasis among military operating aircrew
p0128 A73-21537
LITHIUM
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
LITHIUM COMPOUNDS
NT LITHIUM FLUORIDES
LITHIUM FLUORIDES
Lithium fluoride thermoluminescent dosimeter for measuring ionizing radiation exposure during Apollo 16 flight
p0292 N73-24115
LITHOSPHERE
NT EARTH SURFACE
LIVER
Cation exchange binding of rubidium and cesium by rat liver cell microsomes.
p0588 A73-12549
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169

Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Hepatic lesions observed among flight crews following aviation accidents
p0330 A73-36933
Hemotherapy of coagulation system disturbances of hepatolienal origin
p0428 A73-44299
Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver
p0063 N73-12080
Hepatotoxic effects of dichloromethane inhalation in mice
[AD-751434] p0138 N73-16081
Toxic effects of chronic exposure to dichloromethane in liver microsomal cytochromes
[NASA-TM-X-69101] p0176 N73-18128
Transverse acceleration effects on rat hepatocytic structures
p0181 N73-19086
Morphological changes in liver of dogs subjected to chronic gamma radiation
p0217 N73-20101
Management of asymptomatic carriers of hepatitis associated antigen in Hellenic Air Force personnel
p0265 N73-23060
Incidence of abnormal liver function tests in drug addicts without history of jaundice
[NASA-TT-F-15041] p0374 N73-29044

LOAD FACTORS
U LOADS (FORCES)

LOADING FORCES
U LOADS (FORCES)

LOADING WAVES
U ELASTIC WAVES
U LOADS (FORCES)

LOADS (FORCES)
NT IMPACT LOADS
Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] p0366 N73-27941

LOCALIZATION
U POSITION (LOCATION)

LOCATION
U POSITION (LOCATION)

LOCKHEED MILITARY AIRCRAFT
U MILITARY AIRCRAFT

LOCOMOTION
NT ASTRONAUT LOCOMOTION
NT WALKING
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for anthropomorphic locomotion system synthesis
p0581 A73-11052
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166
Accelerometers, electromyogram sensors, and telemetry system for measuring human body segment motions
[AD-751134] p0142 N73-16104

LOGIC CIRCUITS
NT THRESHOLD GATES
Stability behavior of adapting and untrained random logic nets, enabling intelligent interaction with environment
p0122 A73-20400

LOGIC DESIGN
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902

LOGIC NETWORKS
U LOGIC CIRCUITS

LOGICAL ELEMENTS
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902

LONG TERM EFFECTS
Fatigue in flight personnel during long flights
p0585 A73-12153
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0068 A73-17694
Prolonged space flight and hypokinesia.
p0325 A73-36789
Trash management during Skylab and long duration missions with compactors, autoclaves, biocides and isotope powered water recovery/waste management systems
[ASME PAPER 73-ENAS-31] p0351 A73-37986
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Apollo 16 flight program for investigating physiological effects of prolonged weightlessness on central nervous system, vestibular, neuromuscular and cardiovascular functions, metabolism, radiation sensitivity and body weight
p0398 A73-42176
Human physiological and psychological responses in long time exposure to simulated space station atmosphere as observed by critical tracking task
p0601 N73-10133
Influence of 45 to 60 day space flight on physiological functions of human body
[NASA-CR-129131] p0609 N73-11074
Effects of prolonged weightlessness during space flight on human skeletal and hematopoietic systems
[NASA-TT-F-730] p0107 N73-15116
Evolution of neural messages in human adaptation to prolonged zero gravity flight
p0111 N73-15154
Residual effects of hypnotic drugs on human nervous function and performance
p0226 N73-21106
Pilot performance and sleep patterns in long duration flights and control of hypnotic drug and alcohol use
p0226 N73-21107
Physiological aspects of sleep induction in aircrews after prolonged flight times
p0227 N73-21108
Effects of isoniazid treatment on pilot performance
p0227 N73-21111
Altitude acclimatization period effects on rat resistance to hypoxia
p0255 N73-22006
Human pulmonary volume decrease during long term bed rest
p0256 N73-22016
Aerospace medicine and exobiology research in support of long term manned space flight
[JPRS-59702] p0371 N73-29021

LOSSES
Influence of light conditions and understory tree death on organic matter loss balance in oak underwood
p0378 N73-29331

LOUDNESS
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790
Pure-tone equal-loudness contours for standard tones of different frequencies.
p0387 A73-41176
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815
Mathematical models for deriving loudness function from physical evidence without human judgment
[NASA-TN-D-7297] p0293 N73-24121

LOUDSPEAKERS
A linear motion generator for physiological

research.
p0577 A73-10173

LOW ALTITUDE
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196
Limitations on pilot visual perception of target from low flying aircraft
[AD-759651] p0300 N73-25136

LOW FREQUENCIES
Fluid dynamic aspects of cardiovascular behavior during low frequency whole-body vibration such as encountered by astronauts during launch and reentry
[NASA-CR-133843] p0412 N73-30069

LOW FREQUENCY BANDS
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408

LOW GRAVITY
U REDUCED GRAVITY

LOW PRESSURE
NT HIGH ALTITUDE PRESSURE

LOW SPEED HANDLING
U CONTROLLABILITY

LOW TEMPERATURE ENVIRONMENTS
Plant growth response to low temperature and UV treatment, discussing chlorophyll synthesis, carbohydrate levels, ion balance and enzyme characteristics
p0203 A73-26486
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975

LOW VISIBILITY
Functional aspects of head-up display operation, discussing data accumulated by pilot during low visibility runway approach in executive jet
p0581 A73-11012
Effect of low visibility on performance of vehicle operators
[AD-749248] p0260 N73-22051

LOWER ATMOSPHERE
Influence of man on biospheric balance
[JPRS-59366] p0339 N73-27065

LOWER BODY NEGATIVE PRESSURE (LBNP)
U ACCELERATION STRESSES (PHYSIOLOGY)

LOX (OXYGEN)
U LIQUID OXYGEN

LUDER BANDS
U PLASTIC DEFORMATION

LUMBERING AREAS
U FORESTS

LUMINAIRES
NT FLASH LAMPS

LUMINANCE
Two stage mathematical model of brightness perception operation for stimuli having luminance field with asymmetric discontinuity
p0585 A73-12078
A human factors approach to lighting recommendations and standards.
p0083 A73-16730
Probability estimate for visual target detection in terms of luminance threshold and target size and duration
p0093 A73-18242
Random dot pattern luminance and contrast effects on limiting inter-stimulus interval for visual apparent motion masking by bright field
p0120 A73-20256
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity.
p0153 A73-21897
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342

LUMINESCENCE
NT BIOLUMINESCENCE
NT CHEMILUMINESCENCE
NT ELECTROLUMINESCENCE
NT FLUORESCENCE
NT X RAY FLUORESCENCE
Simazine influence on green algae photosynthetic pigments noting chlorophyll luminescence spectra
[ORIC-TRANS-2992] p0258 N73-22040
Influence of excitation surface with liminary brightness on different regions of the retina
[NASA-TT-F-15124] p0440 N73-32017

LUMINESCENT INTENSITY
U LUMINOUS INTENSITY

LUMINOSITY
Photopic luminous efficiency measured by critical flicker frequency method, noting dependence on intermittence frequency of light stimulus or overall radiance level
[AD-754344] p0585 A73-12076
Relationship between intermediate medium, and transformation and contrast phenomena
[NASA-TT-F-15035] p0376 N73-29055

LUMINOUS FLUX DENSITY
U LUMINOUS INTENSITY

LUMINOUS INTENSITY
NT ILLUMINANCE
NT LUMINANCE
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method.
p0054 A73-14304
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Monkey rod receptor potential suppression at photopic stimulus intensities by neurophysiological inhibitory mechanism for clearing cone initiated visual pathway
p0345 A73-37412
Use of soil-vegetation system brightness coefficients to measure vegetation quantity and crop yield
p0378 N73-29334
Literature concerning retinal adaptation to varying light intensities
[NASA-TT-F-15036] p0450 N73-33074

LUNAR COMPOSITION
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping
p0095 A73-18417
Indigenous lunar organic compound search, considering prebiological chemistry and composition possibility in deeper region under surface
p0095 A73-18428
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis
p0396 A73-42163

LUNAR DUST
Hydrolysis of aqueous extract of lunar dust samples for identification and quantitation of amino acid precursors in extraterrestrial sources, considering prebiotic evolutionary pathways termination
p0095 A73-18421
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples.
p0202 A73-26481
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Mammalian tissue response to subcutaneous and intraperitoneal injection of aqueous suspensions of lunar fine material, noting insolubility in tissue and irritant action
p0203 A73-26484

LUNAR EFFECTS
NT LUNAR GRAVITATIONAL EFFECTS

Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485

LUNAR ENVIRONMENT
Survival of micro-organisms on the moon.
p0115 A73-19111
Simulated lunar magnetic environment effects on humans, using scotopic critical flicker frequency measurements to indicate psychophysiological stress
[AD-748193]
p0101 N73-14088

LUNAR EXPLORATION
Indigenous lunar organic compound search, considering prebiological chemistry and composition possibility in deeper region under surface
p0095 A73-18428

LUNAR GRAVITATIONAL EFFECTS
Biomechanics of locomotion via jumping on lunar surface, discussing subgravity effects on energy requirements, body potential and kinetic energy, muscular work, etc
p0397 A73-42175

LUNAR LANDING
NT APOLLO LUNAR EXPERIMENT MODULE

LUNAR MODULE
NT APOLLO LUNAR EXPERIMENT MODULE

LUNAR PERTURBATION
U LUNAR EFFECTS

LUNAR PROBES
NT LUNIK 16 LUNAR PROBE

LUNAR PROGRAMS
NT APOLLO PROJECT

LUNAR RECEIVING LABORATORY
Occupational medicine procedures for personnel in lunar receiving laboratory for Apollo 11 crew members
p0143 N73-17049
Development of germ-free plants and tissues
[NASA-CR-128947]
p0293 N73-24122

LUNAR ROCKS
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias obtained by vacuum pyrolysis, acid hydrolysis and crushing
p0095 A73-18418
Lunar sample quarantine procedures - Interaction with non-quarantine experiments.
p0313 A73-35978

LUNAR SOIL
NT LUNAR DUST
Pathomorphological and histochemical analysis of Luna 16 fine lunar soil fraction biological effect on mice
p0056 A73-14569
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias obtained by vacuum pyrolysis, acid hydrolysis and crushing
p0095 A73-18418
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes
p0202 A73-26482
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface
p0312 A73-35804
Effects of Apollo 12 lunar materials on lipid levels, including fatty acids and sterols, of tobacco tissue and slash pine cultures
[NASA-CR-128606]
p0591 N73-10063
Cytological changes in pine tissues treated with lunar materials collected on Apollo 12 quarantine mission
[NASA-CR-128914]
p0265 N73-23054
Simulation of growth and mineral uptake by plants growing in lunar soil
[NASA-CR-134036]
p0416 N73-30988

LUNAR SPACECRAFT
NT LUNIK 16 LUNAR PROBE
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488

LUNG MORPHOLOGY
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134
Origin of the external electric field detected near animals and men
p0166 A73-23942
Development and reversibility of pulmonary oxygen poisoning in the rat.
p0247 A73-30516
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415

LUNGS
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168
Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways
p0048 A73-14114
Finite element displacement analysis of a lung.
p0056 A73-14661
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334
Predictions of the dynamic response of the lung.
p0116 A73-19477
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680
Effect of acute exposure to CO2 on lung mechanics in normal man.
p0200 A73-26216
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129
Computer simulation of gas exchange in human lungs.
p0278 A73-31348
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576
Protein synthesis in lung - Recovery from exposure to hyperoxia.
p0323 A73-36653
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.

p0400 A73-42422
Measurement of pulmonary extravascular water volume during exposure to simulated high altitude
[AD-763355] p0418 N73-31004
LUNIK LUNAR PROBES
NT LUNIK 16 LUNAR PROBE
LUNIK 16 LUNAR PROBE
Pathomorphological and histochemical analysis of Luna 16 fine lunar soil fraction biological effect on mice
p0056 A73-14569
LYAPUNOV FUNCTIONS
U LIAPUNOV FUNCTIONS
LYMPH
NT LYMPHOCYTES
LYMPHOCYTES
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
Observation of circulating lymphocytoid cell in monkey after exposure to radio waves
[AD-749583] p0108 N73-15128
Radiation effects on human chromosomal aberrations in peripheral blood lymphocytes
p0263 N73-23041
Functional state of lymphoid cell in peripheral blood of astronauts and immunoreactivity of individual astronants after space flight
[NASA-TT-F-15089] p0418 N73-30999
Continuous low dose gamma irradiation effects on cell population kinetics of mice lymphoid tissue
[NASA-CR-135723] p0437 N73-31999
LYOPHILS
U COLLOIDS
LYSINE
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513

M

MACHINE LEARNING
U LEARNING MACHINES
MACHINE LIFE
U SERVICE LIFE
MACHINE RECOGNITION
U ARTIFICIAL INTELLIGENCE
MACHINING
Toxicity and safety hazard of dry beryllium copper alloy machining for human operator
p0144 N73-17059
MACROPHAGES
Prodromal disease - Immune responses of host macrophage system to humoral factors
[NASA-CR-133455] p0365 N73-27938
MACULAR VISION
U VISION
MAGNESIUM COMPOUNDS
NT CHLOROPHYLLS
MAGNESYN (TRADEMARK)
U SERVOMOTORS
MAGNETIC ABSORPTION
U ELECTROMAGNETIC ABSORPTION
MAGNETIC EFFECTS
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields.
p0053 A73-14289
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man.
p0092 A73-18033
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510
Human perception of moderate strength low frequency magnetic fields tested by whole body immersion in large Helmholtz coil field under acoustic isolation
p0392 A73-41789
MAGNETIC FIELDS
NT GEOMAGNETISM
Human perception of moderate strength low frequency magnetic fields tested by whole body immersion in large Helmholtz coil field under acoustic isolation
p0392 A73-41789
Conference on biological effects of magnetic fields
[NRC-TT-1545] p0099 N73-14070
Physiological regeneration of corneal epithelial mice cells exposed to strong magnetic fields
p0263 N73-23034
MAGNETIC MATERIALS
Magnetic couplings and magnetomechanical transmissions for airtight manipulator design
p0336 N73-26086
MAGNETIC METALS
U MAGNETIC MATERIALS
U METALS
MAGNETIC PROPERTIES
NT GEOMAGNETISM
NT MAGNETIC EFFECTS
NT POLARIZATION CHARACTERISTICS
MAGNETIC RECORDING
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields.
p0053 A73-14289
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
Electrocardiogram recordings on magnetic tape for computerized analysis
[AD-748105] p0075 N73-13124
MAGNETIC RESONANCE
NT NUCLEAR MAGNETIC RESONANCE
NT PROTON MAGNETIC RESONANCE
MAGNETIC SWITCHING
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902
MAGNETIC TAPE RECORDERS
U MAGNETIC RECORDING
MAGNETIC TAPES
Electrocardiogram recordings on magnetic tape for computerized analysis
[AD-748105] p0075 N73-13124
MAGNETOGRAPHS
U MAGNETOMETERS
U RECORDING INSTRUMENTS
MAGNETOMETERS
NT VARIOMETERS
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
MAGNETOTELLURIC PROFILING
U GEOMAGNETISM
MAGNETOVARIOGRAPHS
U VARIOMETERS
MAINTENANCE
NT AIRCRAFT MAINTENANCE
Safe flying, skilled personnel and aircraft maintenance assurance via safety equipment, initial and recurrent training, protective clothing and shelter from inclement weather, maintenance scheduling, etc
p0357 A73-39212
Tasks analyses to determine technical personnel requirements for maintenance of Navy microelectronic shipboard equipment
[AD-748040] p0074 N73-13123
MAMMALS
NT BATS
NT CALVES
NT CATS
NT CHIMPANZEES
NT DOGS
NT GUINEA PIGS
NT HAMSTERS
NT HUMAN BEINGS
NT MICE
NT MONKEYS
NT PRIMATES
NT RABBITS

NT RATS
NT SEALS (ANIMALS)
NT SWINE
Book - Sensory coding in the mammalian nervous system. p0199 A73-25799
Mammalian tissue response to subcutaneous and intraperitoneal injection of aqueous suspensions of lunar fine material, noting insolubility in tissue and irritant action p0203 A73-26484
The radiobiological effects of heavy ions on mammalian cells and bacteria. p0398 A73-42182
Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns p0406 A73-42859
Primitive mammals phylogeny relationship to homeothermic abilities, discussing body temperature, thermoregulation, basal metabolism rates, hibernation, nychthemeral rhythms and responses to heat and cold p0406 A73-42860
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc p0406 A73-42861
Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc p0406 A73-42862
Receiver operating characteristics for underwater signal detection performance of sea lions [AD-746520] p0073 N73-13113
Telemetry experiments with hibernating bear [NASA-CR-133926] p0418 N73-31000

MAN
U HUMAN BEINGS

MAN MACHINE SYSTEMS
A method for aiding human operator performance in a noncompensatory tracking task. p0578 A73-10323
Variations of evoked potentials during various mental stress situations p0047 A73-13825
The problem of human efficiency in automated control systems p0079 A73-16410
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972. p0081 A73-16701
Performance comparisons for joystick and track ball optimized control configurations operating in rate and position modes p0081 A73-16706
Interactive aspects of man/learning system control teams. p0081 A73-16708
The employment of a spoken language computer applied to an air traffic control task. p0083 A73-16728
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving. p0093 A73-18241
Human factor role in flying personnel errors, noting man machine system performance and medical service engagement p0094 A73-18258
German monograph - Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability. p0122 A73-20388
Determination of the optimal time of continuous work for operators in man-machine systems p0157 A73-22849
Algorithm for spectrum decomposition during continuous man-computer interaction, noting Gaussian distribution of spectral bands and linear approximation for background p0159 A73-22971
Implications of psychoanalytic factors for Air Force operations. p0196 A73-25340
Ergatic modeling as dynamic goal-oriented physical process based on heuristic autonomous information-structured organization system with regulated model-human operator interaction p0241 A73-29418
Russian book - Engineering psychology in aviation and astronautics. p0278 A73-31375
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft p0282 A73-32044
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task. p0283 A73-32395
System engineering aspects of the man-machine interface. p0287 A73-33645
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel p0303 A73-34078
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth p0307 A73-34746
Sorcerer Apprentice head mounted display with wand for interaction with computer generated synthetic objects, describing creation of illusory three dimensional environment p0344 A73-37323
Man-machine interface for controllers and end effectors. p0344 A73-37325
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions. p0344 A73-37326
Evaluation of human operator visual performance capability for teleoperator missions. p0344 A73-37327
Design and evaluation of a backhoe model with a master slave control. p0352 A73-38085
Development of pilot-in-the-loop analysis. [AIAA PAPER 72-898] p0408 A73-43110
Information seeking with multiple sources of conflicting and unreliable information. p0431 A73-44778
Conference on manual control systems for human operator modeling and display systems in man machine environments [NASA-SP-281] p0597 N73-10104
Human operator model for man machine control behavior in biodynamic flight environment p0597 N73-10105
Nonlinear multiparameter control model for human operator as vehicle controller p0597 N73-10106
Manual control model structure for industrial management of man machine systems p0598 N73-10115
Utilization of simplified man machine interface concept to manage and control complex space system involving multiple redundant computers that control multiple redundant systems - Vol. 1 [NASA-CR-128576] p0603 N73-10145
Evolution of man-machine-hybrid integration in evolving social structure [AMRU-R-68-3] p0608 N73-11069
Capability of training human to control and/or interact with complex electronic or mechanical systems [AD-746179] p0612 N73-11101
Methods of evaluating electronic cockpit display devices, emphasizing control, psychology, physiology, and subjective rating [DGLR-PAPER-72-97] p0074 N73-13118
Engineering psychology for developing practical designs of man machine systems [AD-748237] p0074 N73-13121
Optimization of work-rest cycles to ensure acceptably high human performance in man machine systems [AD-750176] p0103 N73-14107

Interaction of man machine systems
[JPRS-58290] p0178 N73-18136
Role of cosmonaut in spacecraft control
p0178 N73-18137
Interaction between man and electronic computer in operational planning
p0178 N73-18138
Bibliography on human factors in man machine interactions and systems design
[AD-752800] p0178 N73-18141
Human factors criteria for adaptive computer aiding in man-machine control system
[AD-754835] p0222 N73-20147
Pilot error analysis for airborne navigation procedures
[AD-754214] p0223 N73-20150
Role of cosmonaut in man-spacecraft system, and psychological aspects in training cosmonauts as operators
[NASA-TT-F-727] p0229 N73-21129
Cybernetic integration of experiments into CVT system
[NASA-CR-124150] p0230 N73-21136
Psychophysiological analysis of job performance for optimizing operator production in man machine systems
[NASA-TT-F-14888] p0232 N73-21150
Development and evaluation of free flying teleoperators to include semiexoskeletal master control unit, joystick-analog unit, and three dimensional television system
p0261 N73-22925
Mathematical models for human performance in manned spacecraft control
p0270 N73-23897
Computerized teleoperator applications in manned aerospace systems
p0270 N73-23904
Computerized design of fighter aircraft cockpit electronic control system considering man machine interaction
p0270 N73-23905
Revised edition of human engineering guide to equipment design
[AD-758339] p0296 N73-24140
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems
[NASA-TT-F-14336] p0335 N73-26073
Quantitative evaluations of adaptive physical operator/manipulator control systems
p0336 N73-26090
Interaction concept for improving efficiency of man machine systems
[JPRS-59149] p0340 N73-27070
Adaptive modeling technique for synthesizing controllers to provide corrective dynamics to operator mathematical model in closed loop control system
[NASA-CR-132294] p0377 N73-29060
Ergonomic research and design principles for automatic control and man machine systems
[NASA-TT-F-716] p0413 N73-30079
Examination of man machine systems efficiency in relation to cost criteria
p0414 N73-30087
Effect of human operator errors on reliability and effectiveness of his work
[AD-764937] p0441 N73-32028

MANAGEMENT
NT DATA MANAGEMENT
NT ENVIRONMENT MANAGEMENT
NT INDUSTRIAL MANAGEMENT
NT INFORMATION MANAGEMENT
NT PERSONNEL MANAGEMENT
NT PRODUCTION MANAGEMENT
NT RESEARCH MANAGEMENT
NT RESOURCES MANAGEMENT
NT SAFETY MANAGEMENT
NT SYSTEMS MANAGEMENT
NT WATER MANAGEMENT

MANAGEMENT PLANNING
NT PRODUCTION PLANNING

MANAGEMENT SYSTEMS
Computer-based pupil/tracking monitoring system for Mesa Public Schools, Mesa Arizona
p0191 N73-19985
Application of systems analysis techniques to improve management controls within biomedical research programs
[NBS-TN-761] p0252 N73-21977

MANEUVERS
NT ORBITAL RENDEZVOUS
NT SPACECRAFT DOCKING
The isolation of critical elements within selected maneuvers during primary flight training.
p0083 A73-16727

MANGANESE COMPOUNDS
NT MANGANESE OXIDES

MANGANESE OXIDES
Hygienic importance and toxicity of manganese oxides, and clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067

MANIPULATORS
Operation of spacecraft in orbit with the aid of remote-controlled manipulators - A joint project of ERNA, KYBERTRONIC, KLERA
[DGLR PAPER 72-098] p0584 A73-11659
The mathematics of coordinated control of prosthetic arms and manipulators.
[ASME PAPER 72-WA/AUT-4] p0061 A73-15884
An anthropomorphic master-slave manipulator system.
p0344 A73-37316
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085
Experiments and simulations to determine effect of compliance and force feedback on manipulator performance
[NASA-CR-128605] p0603 N73-10151
Vibration considerations in design of flexible manipulators
[NASA-CR-124189] p0221 N73-20138
Experiments in video camera positioning with regard to remote manipulators
[NASA-CR-124190] p0221 N73-20139
Construction of remote controlled mechanical manipulators using biodynamic principles
[NASA-TT-F-14889] p0232 N73-21152
Long range objectives of design and control study of remote manipulators
[NASA-CR-124191] p0259 N73-22046
Design of automatic controlled remote arm mechanism incorporating feedback information
[NASA-CR-2238] p0260 N73-22055
Development and evaluation of free flying teleoperators to include semiexoskeletal master control unit, joystick-analog unit, and three dimensional television system
p0261 N73-22925
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems
[NASA-TT-F-14336] p0335 N73-26073
Conference on manipulator design considering basic elements
p0335 N73-26074
Volumetric kinematic analysis on servomechanism of remote handling manipulator
p0335 N73-26075
Design requirements for remotely controlled master-slave manipulators
p0335 N73-26076
Matrix method for analyzing kinematics of spatial mechanisms for manipulators
p0335 N73-26077
Remote control of underwater manipulator using cables and automatic servomechanics
p0335 N73-26078
Structural design of computer controlled manipulator for remote handling
p0335 N73-26079
Construction of reversible self synchronous control system for manipulator
p0335 N73-26080
Systems engineering for design of two dimensional automatic manipulator control system using reversible follow-up
p0335 N73-26081
Remotely controlled manipulators with independent follow-up and force reproduction mechanisms
p0336 N73-26082
Design analysis for reversible, self adaptive manipulator control system
p0336 N73-26083

Error analysis on manipulator activation system using reversible self adaptive control mechanism p0336 N73-26084
Design of electrohydraulic control system for underwater manipulator with position feedback p0336 N73-26085
Magnetic couplings and magnetomechanical transmissions for airtight manipulator design p0336 N73-26086
Manipulator kinematics in selecting geometrical shapes of containers and chambers p0336 N73-26087
Bioelectric control system design for reversible slave mechanism manipulator using single muscle input p0336 N73-26088
Motor function modeling of human arm by manipulator using myoelectric control pulses p0336 N73-26091
Screw calculus in kinematic and power analyses on spatial positions of manipulator link mechanisms p0336 N73-26092
Identification of feasible and practical applications of space teleoperator technology for problems of handicapped [NASA-CR-133357] p0367 N73-27949
Automation of computer controlled robot manipulators [JPRS-59717] p0375 N73-29051

MANNED ORBITAL LABORATORIES
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs p0050 A73-14168

MANNED ORBITAL SPACE STATIONS
U ORBITAL SPACE STATIONS

MANNED SPACE FLIGHT
NT APOLLO FLIGHTS
NT APOLLO 11 FLIGHT
NT APOLLO 12 FLIGHT
NT APOLLO 14 FLIGHT
NT APOLLO 15 FLIGHT
NT APOLLO 16 FLIGHT
NT APOLLO 17 FLIGHT
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs p0050 A73-14168
Hibernation applications in manned space flight, considering feasibility and advantages p0050 A73-14170
Astronauts diurnal life cycle inversion during space flight missions, considering social factors and work-rest cycle effects p0208 A73-27715
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness p0280 A73-31515
Proton dosimeter design for distributed body organs. p0424 A73-43389
Aerogenic microbial contamination of manned pressurized cabin atmosphere at reduced temperature and high humidity p0065 N73-12098
Physiological responses to environmental factors related to space flight [NASA-CR-129518] p0066 N73-12107
Effects of prolonged weightlessness during space flight on human skeletal and hematopoietic systems [NASA-TT-F-730] p0107 N73-15116
Physiological factors in human oculomotor responses to space flight stress [DB-208-VOL-1] p0109 N73-15136
Evolution of neural messages in human adaptation to prolonged zero gravity flight p0111 N73-15154
Indices of emotional stress in cosmonauts during Voskhod 2 and Soyuz flights [JPRS-58039] p0148 N73-17104
Habitability factors during long-term space and undersea missions in confined habitats [NASA-CR-130537] p0151 N73-17123
Physical and experimental data obtained by artificial satellites for estimating extraterrestrial radiation hazard in manned space flight [NASA-TT-F-724] p0173 N73-18098
Medical and biological problems of manned space flight [NASA-TT-F-719] p0180 N73-19077
Cardiovascular and respiratory systems reactions in cosmonauts during space flight p0180 N73-19079
Physiological research in support of manned space flight [NASA-CR-128741] p0186 N73-19129
Study to validate Non-Interference Performance Assessment [NASA-CR-128865] p0190 N73-19164
Research in space biology and medicine [JPRS-58620] p0216 N73-20094
Morphological composition of peripheral blood of crew members of Soyuz-9 and Salyut-1 p0217 N73-20104
Microdosimetric pattern of galactic heavy primaries dissipation in tissues during space flight [NASA-CR-131467] p0230 N73-21132
Crew safety for in-flight spacecraft emergencies [NASA-TT-F-14997] p0339 N73-27068
Development of design information for molecular sieve sorbants regenerative CO2-removal systems for manned spacecraft [NASA-CR-2277] p0366 N73-27948
Aerospace medicine and exobiology research in support of long term manned space flight [JPRS-59702] p0371 N73-29021
Effects of weightlessness and acceleration on human body during space flight p0371 N73-29022
Physical monitoring and aftereffects of two manned space flights [NASA-TT-F-15076] p0417 N73-30992
Steam reactor system for manned spacecraft waste processing [NASA-CR-134048] p0440 N73-32021
Problems involved in achieving harmony in life and work of small groups applied to prolonged space flights p0444 N73-33032
Light and carbon dioxide effects on algal life support systems in space flight [NASA-CR-135796] p0445 N73-33039

MANNED SPACECRAFT
NT MANNED ORBITAL LABORATORIES
NT ORBITAL SPACE STATIONS
NT SALYUT SPACE STATION
NT SOYUZ SPACECRAFT
NT SPACE SHUTTLES
NT SPACE STATIONS
Current status of models for the human operator as a controller and decision maker in manned aerospace systems. p0123 A73-20587
Design and performance of prototype nitrogen/oxygen supply unit using water/hydrazine electrolysis to provide cabin leakage makeup in manned spacecraft [NASA-CR-128688] p0112 N73-15159
Cost estimating method for life support systems of manned earth orbital programs [NASA-CR-124305] p0340 N73-27072
Human factors analysis of astronaut working conditions in space vehicles [NASA-TT-F-750] p0366 N73-27946
Decomposition of compounds adsorbed in charcoal of manned spacecraft breathing system [NASA-CR-134013] p0415 N73-30092

MANOMETERS
Telemetry of venous blood pressure at rest and at muscle activity during running. p0053 A73-14290

MANPOWER
NT SCIENTISTS
Manpower requirements for aircraft maintenance operations of USAF [AD-760082] p0337 N73-26097

MANUAL CONTROL
NT CONTROL STICKS
NT VISUAL CONTROL
A method for aiding human operator performance in a noncompensatory tracking task. p0578 A73-10323
Performance comparisons for joystick and track ball optimized control configurations operating in rate and position modes p0081 A73-16706

Need for within-trial feedback as a function of task similarity in adaptive training of manual control.
p0081 A73-16709
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks
p0117 A73-19548
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft
p0282 A73-32044
Positioning accuracy with binary selective and fixed gain manual control systems, using finger stick control for operator performance tests
p0284 A73-32583
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
Conference on manual control systems for human operator modeling and display systems in man machine environments
[NASA-SP-281] p0597 N73-10104
Nonlinear multiparameter control model for human operator as vehicle controller
p0597 N73-10106
Input adaptive behavior model of human operator in pursuit tracking task
p0597 N73-10108
Runway separation standards according to reaction time of pilot manual control response to air traffic controller communication
p0598 N73-10113
Manual control model structure for industrial management of man machine systems
p0598 N73-10115
Dynamic model for nonlinear simulation of human postural control system using sticks
p0599 N73-10116
Predictive display with continuous parameter tracking for quasi-linear model of human-pilot transfer function in closed loop system
p0599 N73-10120
Optimal control model for predicting display requirements in pilot landing performance
p0599 N73-10121
Improved pilot performance using simulated pictorial landing display with symbols
p0599 N73-10122
Visual display format effects on pilot describing functions in manual tracking performance
p0599 N73-10123
Magnetic data tapes containing measurements of pilot scanning behavior, control response and vehicle response during simulated instrument landing approaches
p0600 N73-10124
Effect of automatic landing system display on pilot information requirements
p0600 N73-10126
Measurements of automobile driver response functions in simulated steering control task with visual field display
p0600 N73-10130
Driving speed in relation to interactions among automobile driver, roadway variables, and vehicle control
p0601 N73-10131
Double steering wheel forcing functions for estimating automobile driver manual control response
p0601 N73-10132
Human physiological and psychological responses in long time exposure to simulated space station atmosphere as observed by critical tracking task
p0601 N73-10133
Optimal control model for predicting manual VTOL pilot performance in longitudinal hovering tasks
p0601 N73-10134
Phase margin measure for determining human operator control performance in multivariable closed loop system
p0601 N73-10135
Serial segments method for measuring pilot manual control remnant in vicinity of sine waves
p0601 N73-10136
Minimum quadratic cost optimal control technology for design of F-4C aircraft manual control system
p0601 N73-10137
Hypoxia stress effects on human operator performance in unstable tracking task using manual control
p0602 N73-10138
Effect of concurrent audio tasks on human operator compensatory tracking performance using manual control system
p0602 N73-10139
Attention sharing effects on human operator performing simultaneously dynamic compensatory tracking control tasks
p0602 N73-10140
Motion cue effects on pilot manual control tracking task
p0602 N73-10141
Dynamic model for pilot manual control ability using aural compensatory tracking
p0602 N73-10142
Computerized teleoperator manual control system for remote mechanical hand
p0602 N73-10143
Workload effects on operator grip pressure and neuromuscular transmission in manual tracking task error
[AD-757252] p0269 N73-23089
Motor reaction model for hand motion in decision making manual task
[AD-761518] p0370 N73-27973

MANUFACTURING
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691
Design and fabrication of prototype particulate regenerative filter with backflush for spacecraft fluid system
[NASA-CR-115505] p0268 N73-23084

MAPPING
NT THEMATIC MAPPING
Double cross-validation of video cartographic symbol location performance.
p0082 A73-16719

MARINE BIOLOGY
Ultrasonic marine biotelemetry transmitter utilizing metal oxide semiconductor integrated circuits
[AD-748605] p0074 N73-13119
Effect of sonic boom on fish and fish eggs during developmental stage
[FAA-RD-73-29] p0219 N73-20121
Marine biology literature compilation for Caribbean Sea and adjacent regions
p0261 N73-23022
Marine luminescence data for monitoring algal and pollutant concentrations
[NASA-CR-114578] p0297 N73-25114
Seasonal plankton collections conducted during Tenth Antarctic Expedition
p0379 N73-29363

MARINE ENVIRONMENTS
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc
p0406 A73-42861
Position reporting and communications systems of aviation and marine rescue operations
[AD-761756] p0369 N73-27967
Solar radiation effects on photosynthesis of submerged aquatic plants
p0378 N73-29327

MARKING
NT ISOTOPIC LABELING

MARROW
Stomach shielding effects on chromosomal

aberration frequency in quinea pig and rat marrow cells after gamma radiation at doses of 50 to 200 r
p0213 N73-20074
MARS (PLANET)
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars
[NASA-TM-X-2714] p0107 N73-15118
Search for biological life forms on Mars and other planets
p0416 N73-30985
MARS ATMOSPHERE
Microorganism survival in simulated Mars environment
p0185 N73-19116
MARS ENVIRONMENT
NT MARS ATMOSPHERE
Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards
p0396 A73-42162
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165
MARS LANDING
Thermal stress and mechanical shock effects on release of bacterial spores from stainless steel surfaces with application to Mars landing
[NASA-CR-133868] p0416 N73-30987
MARS PROBES
NT VIKING LANDER SPACECRAFT
NT VIKING MARS PROGRAM
NT VIKING ORBITER SPACECRAFT
MARS SURFACE
Quarantine necessity, protocol and effectiveness for Mars samples, emphasizing risks of foreign replicating agent introduction to earth biosphere
p0056 A73-14321
Chemical evolution before life deduced from carbonaceous meteorites composition, noting porphyrins, optically active substances and isoprenoid hydrocarbons
p0243 A73-30130
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface
p0312 A73-35804
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis
p0396 A73-42163
Procedure for assaying enzyme activity in soils and application to presumptive life tests in Martian soil
[NASA-CR-128399] p0591 N73-10059
MARTIN MILITARY AIRCRAFT
U MILITARY AIRCRAFT
MASKING
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
Interaction between contours in visual masking
p0345 A73-37395
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Masking phenomenon for measuring state of fatique and stress of nervous system
[AD-752975] p0300 N73-25129
MASKS
NT OXYGEN MASKS
MASS FILTERS
U FLUID FILTERS
MASS SPECTROMETERS
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
Design and performance of metabolic gas analyzer using mass spectrometer and digital data printout
[NASA-CR-128842] p0190 N73-19160
Cost analysis of mass spectrometers and gas chromatographs for life support atmosphere monitoring
[NASA-CR-124306] p0341 N73-27076
MASS SPECTROMETRY
U MASS SPECTROSCOPY
MASS SPECTROSCOPY
Gas chromatography-mass spectrometry for analyzing fatty acid and sterol concentrations in plant tissue samples
[NASA-CR-128740] p0186 N73-19131
MASS TRANSFER
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories.
p0403 A73-42678
MATERIAL BALANCE
NT WATER BALANCE
MATERIAL REMOVAL (MACHINING)
U MACHINING
MATERIALS HANDLING
NT PROPELLANT TRANSFER
NT REMOTE HANDLING
Technical and safety aspects of maintenance work on commercial aircraft wing fuel tanks, considering wing deformation effects and sealant materials and reapplications
p0329 A73-36932
Russian book on rocket weapon systems safety handling covering HF electromagnetic, noise and vibration effects, ionizing radiation, fire, etc
p0393 A73-41874
Application of pneumatically controlled prosthetic arm to industrial handling problems
[NASA-TT-F-14628] p0073 N73-13115
Stabilization methods in collecting and shipping of human sera for chemical analyses
p0143 N73-17053
Microbiological inspections of NASA food handling facilities
[NASA-TM-X-64734] p0220 N73-20127
MATERIALS RECOVERY
NT WATER RECLAMATION
MATHEMATICAL LOGIC
NT ALGORITHMS
NT BOOLEAN ALGEBRA
NT THRESHOLD LOGIC
Algebraic nature of thought formation structures
p0431 A73-44905
MATHEMATICAL MODELS
NT ANALOG SIMULATION
NT DIGITAL SIMULATION
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168
Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data
p0577 A73-10169
Axiomatic formulation of a mathematical model for visual adaptation
p0579 A73-10655
Formalization of certain functional aspects of the external respiration system
p0580 A73-10657
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for anthropomorphic locomotion system synthesis
p0581 A73-11052
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465

Two stage mathematical model of brightness perception operation for stimuli having luminance field with asymmetric discontinuity
p0585 A73-12078
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator
p0588 A73-12557
Human body mathematical model described by kinematic and dynamic equations of joined rigid bodies for investigation of self-controlled movements in specified goal attainment
p0058 A73-15207
Status and prospects of EEG spectral analysis.
p0058 A73-15278
Information theory mathematical models applied to different visual function activity phases, covering Shannon and Fisher probability models, Shreider semantic theory and Kolmogorov algorithm
p0060 A73-15784
Mathematical models for distance perception of earth surface features observed from ascending vehicle, considering convergence, accommodation and monocular parallax mechanisms
p0060 A73-15785
Mathematical description of some visual inertia effects
p0060 A73-15786
Axiomatic mathematical model for human visual edge contrast based on additivity, one-dimensionality and contrast continuity parameters
p0060 A73-15788
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790
Mathematical and physical models of human long and short term memory, considering information processing and memorization at lower visual perception levels
p0061 A73-15793
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception
p0061 A73-15796
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
Effects of experimental conditions on parameter estimated when using the Hill model
p0153 A73-21872
Russian book on mathematical models of biological systems covering bioecocenosis, optimal crop, chemostat cultivation, predator-victim society, trophic control, and life support systems
p0154 A73-22347
Water-salt homeostasis mathematical model, solving equations with analog and digital computers
p0166 A73-23941
Analysis of swimming motions.
p0194 A73-25184
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Psychoacoustic theory of signal detectability based on mathematical input-output mapping model and memory role in human auditory system
p0243 A73-30278
Binaural signal detection - Equalization and cancellation theory.
p0244 A73-30284
Calculation of temperature distribution in the human body.
p0281 A73-31999
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure
p0288 A73-33695
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242
A model of psychological annoyance of noise.
p0311 A73-35627
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003
Mathematical analysis of the operation of regulatory mechanisms of the spinal cord
p0354 A73-39005
Continual mechanochemical model of muscular tissue
p0381 A73-40182
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition
p0393 A73-41816
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium
p0408 A73-43105
Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578
Electrical field distribution in the human body.
p0427 A73-44216
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
Mathematical model for physical space transformation into subjective field metric for monocular vision
p0432 A73-44906
A mathematical model for controlled image contour sharpness enhancement
p0432 A73-44907
Neural model as pulse interval processor
[AD-746007] p0606 N73-10169
Mathematical model for in vivo study of glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
Mathematical models for studying vestibular adaptation to stimuli in humans
[AMRU-R-70-1] p0607 N73-11062
Development of mathematical model for slow phase rotational nystagmus induced by head movements
[AMRU-R-71-3] p0607 N73-11065
Analysis of arterial hypoxemia caused by pulmonary malfunctions and regulation of oxygen during exercise and rest
[AD-746979] p0071 N73-13092
Human operator model performance in tracking high performance aircraft
[AD-746725] p0072 N73-13101
Mathematical models for deriving loudness function from physical evidence without human judgment
[NASA-TN-D-7297] p0293 N73-24121
Adaptive modeling technique for synthesizing controllers to provide corrective dynamics to operator mathematical model in closed loop

control system
[NASA-CR-132294] p0377 N73-29060
Ergonomic control system information models
p0414 N73-30082
Kalman filter estimation of aircraft pilot performance
[AD-764694] p0441 N73-32026
Mathematical model and digital computer simulation of cardiovascular control system response to ergometer exercise
p0446 N73-33049
Mathematical models and physiological mechanisms of goal-directed behavior
[JPRS-60091] p0447 N73-33053
Theory of systems for effective behavior predictions
p0447 N73-33054
Approach to construction of formal model of behavior
p0447 N73-33055
One class of adaptive systems and results of computer modeling of their self instruction
p0447 N73-33056
Expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057
Principles of construction for class of models of intelligent behavior
p0448 N73-33059
Experimental evaluation of model of motor behavior
p0448 N73-33060
Model of organization of goal-directed behavior
p0448 N73-33061

MATHEMATICAL STATISTICS
U STATISTICAL ANALYSIS
MATRICES (MATHEMATICS)
NT EIGENVECTORS
MATRIX METHODS
Matrix methods for dynamic modeling of human operator performance using Liapunov functions
p0598 N73-10111
Matrix method for analyzing kinematics of spatial mechanisms for manipulators
p0335 N73-26077

MATRIX STRESS CALCULATION
U MATRIX METHODS
MATURE VEGETATION
U VEGETATION
MCDONNELL AIRCRAFT
NT F-4 AIRCRAFT
MCDONNELL MILITARY AIRCRAFT
U MILITARY AIRCRAFT
MEASURE AND INTEGRATION
A simplified method of calculating thermodilution curves
p0276 A73-31168

MEASURE THEORY
U MEASURE AND INTEGRATION
MEASURING APPARATUS
U MEASURING INSTRUMENTS
MEASURING INSTRUMENTS
NT ACCELEROMETERS
NT ACTINOMETERS
NT ALTIMETERS
NT ANALYZERS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT CALORIMETERS
NT DENSITOMETERS
NT DOSIMETERS
NT ELECTROMETERS
NT ERGOMETERS
NT FLIGHT RECORDERS
NT FLOWMETERS
NT HOT-FILM ANEMOMETERS
NT INDICATING INSTRUMENTS
NT INFRARED DETECTORS
NT MAGNETOMETERS
NT MANOMETERS
NT MASS SPECTROMETERS
NT MECHANOGRAMS
NT OCULOMETERS
NT OPTICAL MEASURING INSTRUMENTS
NT OSCILLOGRAPHS
NT OSMOMETERS
NT POSITION INDICATORS
NT PROPORTIONAL COUNTERS
NT RADIATION COUNTERS
NT RADIATION DETECTORS
NT RADIATION MEASURING INSTRUMENTS
NT RADIO DIRECTION FINDERS
NT RESPIROMETERS
NT RHEOMETERS
NT SCINTILLATION COUNTERS
NT SPECTROMETERS
NT SPECTROPHOTOMETERS
NT STRAIN GAGES
NT TACHOMETERS
NT TEMPERATURE MEASURING INSTRUMENTS
NT THERMOMETERS
NT VARIOMETERS
NT VISCOMETERS
Electronic instruments for continuous cardiovascular systems measurements
[NASA-TT-F-14492] p0604 N73-10154
Automatic device for measuring human metabolic oxygen rate and breathing dynamics
[NASA-CASE-MFS-21415-1] p0112 N73-15156
Instrumentation and techniques for determining effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119
Measurement of control mechanism of accommodation-vergence eye movement system in human eyes using electro-optical measuring instrument
p0411 N73-30062

MECHANICAL DEVICES
Automatic inoculating device for agar trays using cotton swab or loop
[NASA-CASE-LAR-11074-1] p0141 N73-16096
Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] p0439 N73-32014

MECHANICAL DRIVES
Magnetic couplings and magnetomechanical transmissions for airtight manipulator design
p0336 N73-26086

MECHANICAL IMPEDANCE
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
Acceleration effects on mechanical impedance of human body in supine position
p0368 N73-27963

MECHANICAL MEASUREMENT
NT DISPLACEMENT MEASUREMENT
NT FLOW MEASUREMENT
NT PRESSURE MEASUREMENTS
NT STRESS MEASUREMENT
NT VELOCITY MEASUREMENT
NT VIBRATION MEASUREMENT
Angular measurements of foot motion for application to the design of foot-pedals.
p0580 A73-10773
Telemetry methods for maximum static muscle strength measurements, considering dynamic force measurement possibilities
p0054 A73-14296

MECHANICAL PROPERTIES
NT COMPRESSIVE STRENGTH
NT ELASTIC PROPERTIES
NT MODULUS OF ELASTICITY
NT PLASTIC PROPERTIES
NT SHEAR PROPERTIES
NT STRESS RELAXATION
NT THERMAL RESISTANCE
NT VISCOELASTICITY
Some biomechanical properties of the pelvic girdle of man
p0045 A73-13743

MECHANICAL SHOCK
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926
Thermal stress and mechanical shock effects on release of bacterial spores from stainless steel surfaces with application to Mars landing
[NASA-CR-133868] p0416 N73-30987

MECHANOGRAMS
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119

MECHANORECEPTORS
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119

Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Circulatory reflexes from mechanoreceptors in the cardio-aortic area.
p0384 A73-40637
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries
p0429 A73-44720

MEDIA
NT ANISOTROPIC MEDIA

MEDICAL ELECTRONICS
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
Rapid eye movement analyzer.
p0156 A73-22697
Modification and updating of the bioelectric DS2C amplifier for a FET input.
p0159 A73-22936
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system
p0162 A73-23381
Electromagnetic 60 Hz interference in ECG recordings, discussing sources, identifying tests, elimination and ECG amplifier design
p0163 A73-23648
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity
p0166 A73-23849
Digital temperature-measuring device for medical applications
p0236 A73-28338
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Russian book - Methods of studying eye movements.
p0283 A73-32417
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Book - Biomedical instrumentation and measurements.
p0312 A73-35860
Angiotensiotonography using an air plethysmograph
p0322 A73-36575
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
A universal preamplifier for bioelectric signals
p0383 A73-40345
Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation
p0389 A73-41216
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666
Circuit diagram of amplifier-filter for analysis of impulse activity of baroreceptor aortic afferent nerves in rabbits
p0403 A73-42681
Signal processing in medical technology
p0424 A73-43317
Two channel transistor amplifier design with negative capacitance correction for microelectrode applications
p0430 A73-44723
Design and development of biomedical prosthetic and electronic devices
[NASA-CR-130022] p0140 N73-16093
Initial systole and dicrotic notch detecting circuitry for monitoring arterial pressure pulse
[NASA-CASE-LEW-11581-1] p0178 N73-18139
Development of electrocardiogram protection circuits to prevent accidental electrocution and digital cardiotachometer system to display heart rate
p0261 N73-22924

MEDICAL EQUIPMENT
NT ARTIFICIAL EARS
NT ARTIFICIAL HEART VALVES
NT CARDIOTACHOMETERS
NT MECHANOGRAMS
NT PROSTHETIC DEVICES
NT RESPIRATORS
NT STETHOSCOPES
NT SURGICAL INSTRUMENTS
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Use of space technology to solve medical problems and improve medical equipment
p0075 N73-13848
Biophysical mechanisms of noninvasive measurement of CVP in man
[NASA-CR-130348] p0133 N73-16039
Management of NASA employee health problems by automated medical system
p0146 N73-17079
Utilization of aerospace technology in biomedical field - Southwest Research Institute report for Jan. 1973
[NASA-CR-130984] p0173 N73-18097
Design of hemoglobin tester, flow ventilation systems, blood viscometer, isotope handling equipment, and blood pressure measuring device
[NASA-TM-X-66214] p0231 N73-21139
Design of anesthetic flow valve canister system for exhaust gas absorption and laminar ventilation system for operating rooms
p0231 N73-21141
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] p0259 N73-22045
Development of electrocardiogram protection circuits to prevent accidental electrocution and digital cardiotachometer system to display heart rate
p0261 N73-22924
Equipment for implanting electrodes in subcortical structures of cat brain
[NASA-TT-F-15001] p0366 N73-27947
Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
NASA bioinstrumentation list for public utilization
[NASA-SP-5958(01)] p0438 N73-32007
Automatic device for assaying urine on bacterial adenosine triphosphate content
[NASA-CASE-GSC-11169-2] p0438 N73-32011

MEDICAL PERSONNEL
NT FLIGHT SURGEONS
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen.
p0238 A73-28511
Medical examinations and protection procedures for NASA employees working in radiologically controlled areas
p0143 N73-17050

Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347

MEDICAL PHENOMENA
Experimental research in underwater medicine, flight stress, and pilot selection
[DLR-FB-73-15] p0367 N73-27951

MEDICAL SCIENCE
NT DENTISTRY
NT DERMATOLOGY
NT EPIDEMIOLOGY
NT GYNECOLOGY
NT HISTOLOGY
NT IMMUNOLOGY
NT NEUROLOGY
NT NEUROPSYCHIATRY
NT PATHOLOGY
NT PSYCHIATRY
NT RADIATION MEDICINE
NT RADIOBIOLOGY
NT RADIOLOGY
NT SYMPTOMOLOGY
Predicting coronary heart disease.
p0244 A73-30351
Research and development in Army aviation medical science and problems
[AD-749456] p0108 N73-15129
Applications of aerospace technology in biology and medicine
[NASA-CR-133226] p0334 N73-26067
Application of aerospace medicine research in science and technology
[JPRS-59803] p0374 N73-29040
Aerospace Medical Research Laboratory handbook on medical monitoring and treatment of environmental stresses
[AD-760813] p0377 N73-29061
Medical analysis of vitamin balance among personnel of Tenth Soviet Antarctic Expedition to show effects on health and acclimatization ability
p0379 N73-29357
Medical evaluation of pilots using onboard flight recorders
p0416 N73-30986

MEDICAL SERVICES
Military contributions to aviation medicine.
[AIAA PAPER 73-68] p0086 A73-17636
Human factor role in flying personnel errors, noting man machine system performance and medical service engagement
p0094 A73-18258
Medical diagnosis of pilot performance disturbances from viewpoint of flight surgeon responsibilities
p0277 A73-31171
Space technology for developing ground based integrated medical laboratory
p0075 N73-13851
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Occupational medicine procedures for personnel in lunar receiving laboratory for Apollo 11 crew members
p0143 N73-17049
Multiphase health screening and medical history questionnaire for preventive/occupational physical examinations
p0143 N73-17052
Automated medical history questionnaire for screening industrial personnel and scheduling physical examinations
p0144 N73-17060
Routine proctosigmoidoscopic examinations of asymptotic NASA personnel for cancer prevention
p0144 N73-17061
Industrial health measures and environmental control to insure worker productivity
p0146 N73-17077
Conference on occupational and environmental medical services provided to NASA employees
[NASA-TM-X-69074] p0146 N73-17078
Influence of repeated test and dietary counseling on hypercholesterolemia control in NASA employees
p0146 N73-17081
Precoronary care and sudden death prevention due to coronary disease in industrial workers
p0146 N73-17084
Automated medical record system for identifying and managing medical problems for Navy
p0147 N73-17087
Medical services of operating environmental health program for industrial workers
p0147 N73-17093
Clinical medicine and human factors engineering functions conducted during Tenth Soviet Antarctic Expedition
p0379 N73-29347
Analysis of physiological effects of diet on personnel of Tenth Soviet Antarctic Expedition
p0379 N73-29358

MEDICINE
Sports medicine - parameters necessary for maintaining competitive form
p0227 N73-21114

MEETINGS
U CONFERENCES

MELANIN
Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657

MEMBRANE ANALOGY
U MEMBRANE STRUCTURES

MEMBRANE STRUCTURES
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993

MEMBRANE THEORY
U MEMBRANE STRUCTURES

MEMBRANES
NT ION EXCHANGE MEMBRANE ELECTROLYTES
NT MEMBRANE STRUCTURES
NT PLEURAE
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light.
p0581 A73-10973
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells
p0197 A73-25591
Cardiac membrane capacitance physiological properties and measurements in Purkinje fibers, ventricular and atrial muscles and heart tissues
p0197 A73-25596
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789

Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[C00-3162-9] p0070 N73-13091

MEMORY

A model of a memory device based on neuron-like elements which realizes the holographic principles of data recording and readout
p0061 A73-15792

Mathematical and physical models of human long and short term memory, considering information processing and memorization at lower visual perception levels
p0061 A73-15793

Human memory model with associative linkage between neuronal network information elements
p0061 A73-15797

Low body temperature effects on learned behavior retention under hibernation conditions in squirrels
p0078 A73-16324

Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160

Rapid eye movement state beneficial effects on memory refuted in favor of delta wave slumber, emphasizing stage 4 sleep
p0093 A73-18225

A method for the investigation of interpolated information and time effects in short term retention.
p0096 A73-18475

Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response
p0166 A73-24326

Memory process in terms of cortex-subcortex interrelation, brain lability level and biopotential trace processes
p0194 A73-25198

Useful future action models of instrumental reflexes and voluntary actions based on memory role in engram storage of received stimuli
p0194 A73-25199

Retention of information in the iconic visual memory during recognition of images of varying complexity
p0199 A73-26084

Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106

Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123

Memory fixation during sleep, discussing EEG, EOG, EMG and ECG recordings for differences between light and paradoxal sleep
p0280 A73-31749

Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

Two components and two stages in search performance - A case study in visual search.
p0435 A73-45339

MENSTRUATION

Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509

MENTAL HEALTH

Information yield of the Annual Medical Examination for Flying.
p0356 A73-39110

Mental health services for emotional counselling in NASA facilities to insure maximum human performance
p0144 N73-17062

Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064

MENTAL PERFORMANCE

Intellectual ability and performance on a non-verbal problem-solving task.
p0044 A73-13553

An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718

Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance
p0082 A73-16720

Statistical correlation between human mental activity and EEG beta rhythm wave energy and frequency characteristics
p0092 A73-18159

Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160

German monograph - Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability.
p0122 A73-20388

Diurnal psychic working capacity dynamics under conditions of continuous 72-hr wakefulness
p0124 A73-20989

Cerebral localization of speech, discussing cortical lesions, aphasia and mental activity correlation theories
p0126 A73-21425

Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528

Correlation analysis of the bioelectrical activity of the brain during mental work
p0163 A73-23678

Experimental study of emotional stress in operators
p0193 A73-25038

Ergonomic endurance limits, physiological strains and fatigue assessment in video coding information task performance as function of work shift time length
p0198 A73-25649

Forced guidance and distribution of practice in sequential information processing.
p0201 A73-26319

Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization.
p0204 A73-26749

Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514

Psychological factors influencing the relationship between cardiac arrhythmia and mental load.
p0250 A73-30877

Mental load and the measurement of heart rate variability.
p0250 A73-30881

The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396

Circadian rhythms in human mental performance from waking day, round of clock and simulated shiftwork studies
p0286 A73-33156

Intellectual performance during prolonged exposure to noise and mild hypoxia.
p0325 A73-36783

Aircrew workload during the approach and landing.
p0351 A73-38005

Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161

Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208

Role of associations in the formation of evoked potentials from the human cerebral cortex
p0362 A73-39798

Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157

Visual search, complex backgrounds, mental counters, and eye movements.
p0388 A73-41185

Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215

The effect of anxiety control on the level of information processing
p0425 A73-43848
Effect of prolonged hypokinesia on the higher nervous activity of humans
p0428 A73-44668
Algebraic nature of thought formation structures
p0431 A73-44905
Annotated bibliography on reaction times in selected human information processing tasks
[AD-745416] p0596 N73-10095
Frequency discriminator for on-line measurements of entrainment and synchronization in EEG signals as related to human alertness
[NASA-CR-129173] p0611 N73-11091
Effect of mood on human performance, possibility of using skin analyzer for communication, and effect of prolonged exposure to depths of 160 m on mental functioning
[JPRS-57541] p0068 N73-13072
Mental functions of aquanauts during and after exposure to depths up to 160 m
p0068 N73-13073
Physiological and mental performance effects of underwater work on humans
[AD-747701] p0072 N73-13107
Feasibility of saliva analysis for measuring mental stress in man
[AD-747671] p0073 N73-13111
Differences in speed of mentally processing displays containing information about right and left
[AD-759723] p0334 N73-26070
Pilot selection by means of concentration stress test
p0368 N73-27957

MENTAL STRESS
U STRESS (PSYCHOLOGY)
MERCAPTAN
U THIOLS
MERCAPTO COMPOUNDS
U THIOLS
MERCURY COMPOUNDS
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
METABOLIC WASTES
NT FECES
NT HUMAN WASTES
NT URINE
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens
p0235 A73-28283
Influence of hypoxia on the release of certain gaseous wastes in white rats
p0304 A73-34228
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle.
[ASME PAPER 73-ENAS-42] p0351 A73-37989
Hyperoxia effects on elimination of carbon monoxide, ammonia, ketones, and aldehydes by rats
p0063 N73-12077
Chromatographic determination of gaseous metabolites released by man during reduced food intake
p0064 N73-12091
Toxic effects of metabolic waste gases on rat organisms
p0183 N73-19101
Hyperoxic atmosphere effect on rat metabolism and elimination of gaseous wastes
p0254 N73-22004
Hypoxia effects on release of gaseous wastes from rat vital functions
p0372 N73-29025

METABOLISM
NT ADRENAL METABOLISM
NT ASCORBIC ACID METABOLISM
NT CALCIUM METABOLISM
NT CARBOHYDRATE METABOLISM
NT CATABOLISM
NT ELECTROLYTE METABOLISM
NT ENZYME ACTIVITY
NT FERMENTATION
NT HORMONE METABOLISMS
NT HYPOGLYCEMIA
NT LIPID METABOLISM
NT NITROGEN METABOLISM
NT OXYGEN METABOLISM
NT PHOSPHORUS METABOLISM
NT PROTEIN METABOLISM
Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle
p0581 A73-11023
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933
Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay
p0162 A73-23319
Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products.
p0202 A73-26479
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatigue
p0278 A73-31393
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512
Validity of Haldane calculation for estimating respiratory gas exchange.

p0310 A73-35463
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571
Activity variations of some renal enzymes during stepwise increased hypoxia
p0323 A73-36582
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Effect of training with eccentric muscle contractions on skeletal muscle metabolites.
p0390 A73-41523
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
Metabolic and myoelectric reactions under chemical thermoregulation in rats after accelerated cold adaptation
p0430 A73-44721
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071
Hyperammonemia development in metabolic toxicity of hydrazine
[AD-749519] p0100 N73-14077
Physiology of depressed metabolic states and gastrointestinal responses,to ionizing radiation
[NASA-CR-130381] p0133 N73-16038
Effect of accelerations on thiamine S-35 distribution in organs, tissues, and subcellular structures of white mice
p0133 N73-16044
Skylab experiments to assess weightlessness effects on human nutritional metabolism and musculoskeletal function
p0175 N73-18115
Metabolism and propagation of microbes in outer planets
[NASA-CR-131091] p0186 N73-19127
Influence of long duration flight missions on metabolic and endocrine functions of pilots and navigators
p0189 N73-19152
Dynamics of nitrogenous cerebral metabolites accompanying repeated hypothermia and subsequent self-heating
p0216 N73-20097
Effect of hypokinesis of varying duration on fluid-electrolyte metabolism and composition in blood and tissues of animals
p0216 N73-20098
In vitro metabolism of antipyrine in rats
[NASA-TT-F-14868] p0218 N73-20116
Exercise and muscle stimulation for preventing metabolism changes during bed rest
p0256 N73-22019
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
Effects of atmospheric oxygen concentration on Chlorella photosynthesis
p0262 N73-23032
Mechanism of inert gas influence on metabolism
[NASA-CR-133214] p0298 N73-25120
Metabolism and propagation of microbial contamination in planetary atmospheres
[NASA-CR-133638] p0375 N73-29049

METAL HALIDES
NT CALCIUM CHLORIDES
NT COPPER CHLORIDES
NT LITHIUM FLUORIDES
NT POTASSIUM CHLORIDES
NT SILVER CHLORIDES
NT SODIUM CHLORIDES
METAL IONS
NT FERRIC IONS
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
Effect of copper ions on the functional state of the neuromuscular apparatus
p0154 A73-22369
METAL OXIDE SEMICONDUCTORS
Ultrasonic marine biotelemetry transmitter utilizing metal oxide semiconductor integrated circuits
[AD-748605] p0074 N73-13119
METAL OXIDES
NT BERYLLIUM OXIDES
NT MANGANESE OXIDES
NT POTASSIUM OXIDES
METAL PARTICLES
NT METAL POWDER
METAL POWDER
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680
METALLORGANIC COMPOUNDS
U ORGANOMETALLIC COMPOUNDS
METALS
NT ALUMINUM
NT BERYLLIUM
NT CALCIUM
NT CALCIUM ISOTOPES
NT COBALT 60
NT IRON
NT LEAD (METAL)
NT LITHIUM
NT METAL POWDER
NT PLUTONIUM 238
NT POTASSIUM
NT POTASSIUM ISOTOPES
NT RARE EARTH ELEMENTS
NT RUBIDIUM
NT SODIUM
NT SODIUM 24
NT TITANIUM
Combustibility and toxicity of metals and alloys
[AD-764287] p0418 N73-31003
METEORITE COLLISIONS
Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping
p0095 A73-18417
METEORITE COMPRESSION TESTS
U MECHANICAL PROPERTIES
METEORITES
NT CARBONACEOUS METEORITES
METEORITIC COMPOSITION
Chemical evolution before life deduced from carbonaceous meteorites composition, noting porphyrins, optically active substances and isoprenoid hydrocarbons
p0243 A73-30130
Extraterrestrial life detection from imaging observations on lunar samples and meteorites, discussing application to Mars surface
p0312 A73-35804
METEORITIC IONIZATION
U ATMOSPHERIC IONIZATION
METEOROLOGICAL PARAMETERS
Meteorological conditions and infection of upper respiratory tract in children
[NLL-M-22866-(5828.4F)] p0297 N73-25109
METEOROLOGY
Agroclimatology study of highlands of eastern Africa
[WMO-339] p0446 N73-33045
METERS
U MEASURING INSTRUMENTS
METHANE
Toxic effects of continuous exposure to dichloromethane vapor on dogs, monkeys, rats, and mice
[AD-746295] p0611 N73-11088

Hepatotoxic effects of dichloromethane inhalation in mice
[AD-751434] p0138 N73-16081
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons
[AGARD-R-599] p0149 N73-17106
Toxic effects of chronic exposure to dichloromethane in liver microsomal cytochromes
[NASA-TM-X-69101] p0176 N73-18128

METHIONINE
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864

METHODOLOGY
Articles on methodology and historical importance of scientific research in creativity
[TT-70-57147-2] p0413 N73-30075
Methods and procedures for ergonomic research
p0414 N73-30086

METHODS
U METHODOLOGY

METHYL CHLORIDE
Effects of continuous methylene chloride exposure on spontaneous activity of mice for two weeks
[AD-751435] p0139 N73-16082

METHYL COMPOUNDS
Toxicity of long term methyl isobutyl ketone exposure in dogs, monkeys, mice, and rats
[NASA-TM-X-69100] p0177 N73-18130

METHYLENE
Toxicity of atmospheric dichloromethane levels in simulated space cabin atmosphere on dogs, rats, mice, and monkeys
[NASA-TM-X-69099] p0177 N73-18129

METHYLHYDRAZINE
Animal species susceptibility to toxic effects of long term exposure to environmental monomethylhydrazine
[AD-751441] p0139 N73-16086
Industrial health hazard in chronic exposure to monomethylhydrazine and dose related hemolytic anemia in humans
[AD-751440] p0139 N73-16087
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys
[AD-751232] p0140 N73-16092

METRIC SPACE
Mathematical model for physical space transformation into subjective field metric for monocular vision
p0432 A73-44906

MICE
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481
Effectiveness of pharmacochemical protective substances on irradiated mice as neutron component increases
[DRIC-THANS-2961] p0108 N73-15124
Effect of accelerations on thiamine S-35 distribution in organs, tissues, and subcellular structures of white mice
p0133 N73-16044
Mortality and blood cell count variation in mice after irradiation with fast neutrons and X rays
[BMVG-FBWT-72-16] p0138 N73-16077
Hepatotoxic effects of dichloromethane inhalation in mice
[AD-751434] p0138 N73-16081
Effects of continuous methylene chloride exposure on spontaneous activity of mice for two weeks
[AD-751435] p0139 N73-16082
Correlation of physical activity and oxygen consumption between man and mouse
[FOA-1-B-1233-A5] p0149 N73-17108
Toxic effects of human exhaled air on mice organisms
p0183 N73-19103
Resistance of mice to acceleration overloads after injection of aminothiol group radioprotector
p0211 N73-20056
Transverse acceleration overload effects on mice sensitivity to toxic doses of cysteamine and aminothiol group antiradiation drugs
p0212 N73-20061
Antiradiation effectiveness of cysteamine in mice under various conditions of gamma radiation
p0212 N73-20067
Gamma radiation effects on toxic cysteamine elimination in irradiated and nonirradiated mice
p0213 N73-20070
Mortality rate in antiradiation drug protected mice subjected to gamma radiation overloads
p0214 N73-20079
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature
[NASA-TT-F-14861] p0219 N73-20123
Physiological regeneration of corneal epithelial mice cells exposed to strong magnetic fields
p0263 N73-23034
Continuous low dose gamma irradiation effects on cell population kinetics of mice lymphoid tissue
[NASA-CR-135723] p0437 N73-31999
Course of infectious process and functional activity of pulmonary macrophages in mice confined to atmosphere with high oxygen content
p0442 N73-33016
Food consumption and morphological indices of blood in white mice with replacement of air nitrogen by inert gases in pressurized chamber
p0442 N73-33020

MICROBE
U MICROORGANISMS

MICROBIOLOGY
NT BACTERIOLOGY
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828
Electric discharge and microbiological experiments in simulated Jovian atmosphere for investigation of Jupiter life prospects
p0202 A73-26478
Results and prospects of microbiological studies in outer space.
p0203 A73-26487
Microbiological testing of Skylab foods.
p0205 A73-27075
International literature survey of microbiological space research for 1930-1970, discussing high altitude balloon, rocket and satellite experiments, weightlessness effects, mutagenesis, etc
p0279 A73-31501
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
Microbial contamination of water - Traditional and space-age problems and approaches.
[ASME PAPER 73-ENAS-33] p0351 A73-37988
Characteristics of photogenic bacteria - Micrococcus pierantonii
[NASA-TT-F-14439] p0608 N73-11072
Aerogenic microbial contamination of manned pressurized cabin atmosphere at reduced temperature and high humidity
p0065 N73-12098
Analysis of resistance of cultured and natural microbes in ethylene oxide sterilization method
[NASA-TT-F-14612] p0069 N73-13078
Microbial analysis of Apollo 14 astronauts
[NASA-TM-X-58094] p0099 N73-14073
Automatic swabbing apparatus for sampling of microbiological surfaces
[NASA-CASE-LAR-11069-1] p0136 N73-16061
Automatic inoculating device for agar trays using cotton swab or loop
[NASA-CASE-LAR-11074-1] p0141 N73-16096
Analysis of standards and precedures for planetary quarantine with emphasis on determination of mission specifications
[NASA-CR-130558] p0148 N73-17103
Microbiological assay procedures for spacecraft cabling, antennas, solar panels, and thermal blankets
[NASA-CR-130383] p0149 N73-17109
Antimicrobial water reclamation methods for processing human urine

p0183 N73-19105
Microbiological investigation of neutral buoyancy simulator for weightless space environment testing [NASA-TM-X-64736] p0229 N73-21127
Apollo 16 microbiological experiment on microbial response to aerospace environments - Part B p0232 N73-21762
Microbiological experiments aboard balloons, rockets, and earth satellites - literature review p0262 N73-23025
Use of ultrafine fiber filter cloth for removing bacterial contaminants from air [NASA-TT-F-14940] p0293 N73-24123

MICROCALORIMETERS
U CALORIMETERS

MICROCLIMATOLOGY
Thermal protective garment using independent regional control of coolant temperature. p0117 A73-19481
Analysis of microclimate of living and service quarters during Tenth Soviet Antarctic Expedition p0379 N73-29359

MICROINSTRUMENTATION
The electroretinogram, as analyzed by microelectrode studies. p0162 A73-23318
Decatron indicator for a micromanipulator controlled by a stepping motor p0250 A73-30850
Two channel transistor amplifier design with negative capacitance correction for microelectrode applications p0430 A73-44723
Intracellular measurements in a closed hyperbaric chamber. p0434 A73-45072

MICROMANOMETERS
U MANOMETERS

MICROMINIATURIZED ELECTRONIC DEVICES
Surgically implanted single and multichannel telemetry systems for monitoring single and multiple physiological parameters, discussing size and power requirements p0054 A73-14302
Field of view and target uncertainty in visual search and inspection. p0194 A73-25181

MICROORGANISMS
NT AEROBES
NT ANAEROBES
NT BACILLUS
NT BACTERIA
NT ESCHERICHIA
NT NITROBACTER
NT PSEUDOMONAS
NT PSYCHROPHILES
NT SPORES
NT STAPHYLOCOCCUS
NT STREPTOCOCCUS
NT VIRUSES
Resistance of soil microorganisms to starvation. p0589 A73-12627
Biological, chemical and cytological methods of microorganism detection integrated into single instrument p0056 A73-14320
Russian book on radiation genetics of microorganisms covering lethal and mutagenic action of radiation on fungi, microscopic algae, bacteria and viruses p0060 A73-15701
Microflora of a sealed cabin with human subjects in a 3-day experiment with reduced temperature and high relative humidity p0088 A73-17697
Survival of micro-organisms on the moon. p0115 A73-19111
A method for studying the action of high-intensity electric fields on microorganisms p0167 A73-24419
Results and prospects of microbiological studies in outer space. p0203 A73-26487
Estimating the number of terrestrial organisms on the moon. p0203 A73-26488
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia. p0241 A73-29723
Responses of indigenous microorganisms to soil incubation as viewed by transmission electron microscopy of cell thin sections. p0241 A73-29724
Biological indicators and the effectiveness of sterilization procedures. p0288 A73-33692
Formaldehyde gas as a sterilant. p0288 A73-33694
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure p0288 A73-33695
The synergistic inactivation of biological systems by thermoradiation. p0288 A73-33696
Ten years of development of the Planetary Quarantine Program of the United States. p0313 A73-35966
Developments in the analysis of planetary quarantine requirements. p0395 A73-42159
Safety margins in the implementation of planetary quarantine requirements. p0395 A73-42161
Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards p0396 A73-42162
Estimation of the biological danger of the very high energy component of space radiation. p0398 A73-42180
Directed Panspermia theory of terrestrial bioevolution, suggesting microorganism transmission to earth by intelligent technologically advanced civilization via spacecraft p0428 A73-44553
Analysis of resistance of cultured and natural microbes in ethylene oxide sterilization method [NASA-TT-F-14612] p0069 N73-13078
Refutation of microbial ability to reduce phosphate using thermochemical computations [NASA-TT-F-14724] p0069 N73-13081
Soil sampling and microorganism analysis in planetary spacecraft assembly area for prevention of Mars contamination [NASA-CR-130009] p0135 N73-16059
Automatic swabbing apparatus for sampling of microbiological surfaces [NASA-CASE-LAR-11069-1] p0136 N73-16061
Microorganism survival in simulated Mars environment p0185 N73-19116
Control equipment for sterilization facility used to thermally inactivate microbes on interplanetary space vehicle components [NASA-CR-131103] p0185 N73-19122
Microbial contamination studies for spacecraft assemblies [NASA-CR-131086] p0185 N73-19123
Metabolism and propagation of microbes in outer planets [NASA-CR-131091] p0186 N73-19127
Development of procedures of identification of microorganisms on orbiting spacecraft [NASA-CR-128747] p0186 N73-19132
Apollo 16 microbiological experiment on microbial response to aerospace environments - Part B p0232 N73-21762
Ability of organism to maintain normal physiological activities in bioregenerative system [NASA-CR-130807] p0252 N73-21979
Microbiological studies of Apollo 17 command module preflight and postflight samples [NASA-CR-132022] p0265 N73-23056
Conference on Apollo 16 experiment for measuring microbial response to space environment [NASA-TM-X-58103] p0291 N73-24102
Design of microbial test system for Apollo 16 mission p0291 N73-24103
Metabolism and propagation of microbial contamination in planetary atmospheres [NASA-CR-133638] p0375 N73-29049
Biodetection grinder for sampling aerospace materials for microorganisms [NASA-TM-X-64765] p0376 N73-29059

MICROPHONES
Response variations of microphone worn on human body
[BM-RI-7810] p0376 N73-29058
MICROPOLAR FLUIDS
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles
p0042 A73-13302
MICROSCOPES
NT ELECTRON MICROSCOPES
Automatic microscopy for mitotic cell location.
p0206 A73-27144
MICROSCOPY
NT ULTRAVIOLET MICROSCOPY
MICROSTRUCTURE
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
Computer technique for automatic analysis of planar characteristics of chromosome patterns in microscopic observations
[JPRS-57418] p0070 N73-13085
MICROWAVE ANTENNAS
Microwave radiation hazards around large microwave antenna.
p0343 A73-37274
MICROWAVE EQUIPMENT
NT CATHODE RAY TUBES
NT IMAGE TUBES
NT MICROWAVE ANTENNAS
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
MICROWAVE FREQUENCIES
Physiological effects of microwave electromagnetic fields on human and animal organisms, considering etiology, diagnostics and prophylaxis
p0093 A73-18256
Biological effectiveness of microwave field and human tolerance
[JPRS-57209] p0593 N73-10073
MICROWAVE RADIATION
U MICROWAVES
MICROWAVE TUBES
NT CATHODE RAY TUBES
NT IMAGE TUBES
MICROWAVES
NT MILLIMETER WAVES
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169
The combined influence of microwave radiation and an adverse climate on the organism
p0277 A73-31170
Biophysical hazards of microwave radiation.
p0285 A73-32723
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159
Research on biological effects of microwave radiation
[MBL-1972-5] p0591 N73-10060
Abstracts on microwave radiation effects on human and animal physiological functions and life expectancy
[MBL-1972-6] p0591 N73-10061
Biological effects of microwave irradiation on humans - literature review
[UR-3490-29] p0107 N73-15120
Response of pituitary-thyroid axis to microwave radiation
[VR-3490-149] p0107 N73-15122
Literature review of experimental studies to assess relationship of exposure to microwaves and subsequent development of cataracts
[UR-3490-103] p0107 N73-15123
Thermal effects of microwave and radio frequency radiation on biological systems
[MBL-1971-7-PT-1] p0264 N73-23048
Microwave radiation effects on rat tissues and length of survival
p0415 N73-30904
MICTURITION
U URINATION
MIDDLE EAR
Spontaneous middle ear muscle activity in man - A rapid eye movement sleep phenomenon.
p0587 A73-12423
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system.
p0078 A73-16249
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity
p0244 A73-30279
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes.
p0330 A73-36934
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815
Middle ear barotrauma effect on work capacity and flight fitness of flying personnel
p0254 N73-22000
Middle ear muscle reflex thresholds to various aircraft noises
[AD-764739] p0446 N73-33048
MIGRATION
Migration corridors for ducks and geese and effects on aviation safety
[AD-748114] p0073 N73-13109
MILITARY AIRCRAFT
Neurological fatigue-indices of flight crews of long-range and military transport aviation
p0193 A73-25040
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196
Analysis of US Navy aviation combat casualty experiences in Southeast Asia to determine effectiveness of rescue and recovery operations under combat conditions
[AD-761636] p0370 N73-27972
MILITARY AVIATION
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation
p0083 A73-16733
Military contributions to aviation medicine.
[AIAA PAPER 73-68] p0086 A73-17636
Case histories of valvular cardiopathies in military pilots, determining tolerance to flight
p0115 A73-19209
Proteinuria and military aircrew
p0128 A73-21539
Color vision standards for flying military aircrews
[FPRC/1319] p0366 N73-27942
Bibliography of anthropometric information for Air Force human factors engineering
[AD-762287] p0371 N73-27978
MILITARY HELICOPTERS
NT UH-1 HELICOPTER
MILITARY PSYCHIATRY
U MILITARY PSYCHOLOGY
MILITARY PSYCHOLOGY
Implications of psychoanalytic factors for Air Force operations.
p0196 A73-25340
Naval aviator training program dropouts identification in terms of physiological, safety, security, social, self-esteem and self-actualization needs
p0247 A73-30513
Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129
Time-span of discretion as measure of military work and responsibility
[DRAE-M45] p0260 N73-22049

MILITARY TECHNOLOGY
System engineering aspects of the man-machine interface.
p0287 A73-33645
Research and development in Army aviation medical science and problems
[AD-749456] p0108 N73-15129
Evaluation of helmet weight on head by military personnel
[AD-748412] p0261 N73-22056
Manpower requirements for aircraft maintenance operations of USAF
[AD-760082] p0337 N73-26097
Military personnel management and human factors engineering
[AD-763168] p0415 N73-30094
Combat job performance and training for air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027
MILITARY VEHICLES
Vibrational effects on visual acuity of human operator seated in military tracked vehicle
[AD-750345] p0114 N73-15172
MILLIMETER WAVES
Reactions of living organisms to the action of electromagnetic waves in the millimeter range
p0426 A73-44094
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
MINERALS
NT ARAGONITE
Therapeutic value of mineral water diets especially Karlsbad Muhlbrunn water
[NASA-TT-F-14620] p0069 N73-13079
Biological mineralization products of human waste for autotroph cultivation
p0184 N73-19109
Simulation of growth and mineral uptake by plants growing in lunar soil
[NASA-CR-134036] p0416 N73-30988
MINIATURE ELECTRONIC EQUIPMENT
Development and adjustment of a multi-channel miniaturized PM/AM telemetering system adapted to the primates.
p0053 A73-14284
Miniature biotelemeter giving 10 channels of wideband biomedical data.
p0058 A73-15388
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system
p0162 A73-23381
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] p0101 N73-14093
MISSILE SIMULATION (MATH MODELS)
U MATHEMATICAL MODELS
MISSILE SIMULATORS (TRAINING)
U TRAINING SIMULATORS
MISSILE STABILIZATION
U STABILIZATION
MISSION PLANNING
Effects of planetary quarantine constraints on advanced planetary mission planning
[NASA-CR-130861] p0176 N73-18123
Planning and source allocation for planetary quarantine measures for interplanetary automated spacecrafts
[NASA-CR-131291] p0220 N73-20126
Parameters requiring consideration by planners and designers when planning EVA functions for astronauts - Vol. 1
[NASA-CR-128926] p0268 N73-23081
Model for estimating impact of manned EVA costs on future payloads - Vol. 3
[NASA-CR-128928] p0268 N73-23083
Satellite quarantine constraints in outer planet mission planning
[NASA-CR-135791] p0445 N73-33041
MITOCHONDRIA
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
p0056 A73-14647
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
MITOSIS
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
Mitotic activity in dorsal epidermis of Rana pipiens.
p0122 A73-20456
Automatic microscopy for mitotic cell location.
p0206 A73-27144
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510
MIXING
NT SUSPENDING (MIXING)
MIXTURES
NT AEROSOLS
NT AQUEOUS SOLUTIONS
NT COLLOIDS
NT GAS MIXTURES
NT NUCLEAR EMULSIONS
NT SMOKE
MNEMONICS
Operational principles and functions of mnemonic diagrams in controlled system
p0414 N73-30083
MOBILITY
NT ELECTRON MOBILITY
NT IONIC MOBILITY
MODE OF VIBRATION
U VIBRATION MODE
MODELS
NT ANALOG SIMULATION
NT ATMOSPHERIC MODELS
NT DIGITAL SIMULATION
NT DYNAMIC MODELS
NT MATHEMATICAL MODELS
MODES
NT PROPAGATION MODES
NT VIBRATION MODE
MODULATION
NT AMPLITUDE MODULATION
NT DELTA MODULATION
NT FREQUENCY MODULATION
NT LIGHT MODULATION
NT PULSE DURATION MODULATION
NT PULSE FREQUENCY MODULATION TELEMETRY
NT PULSE MODULATION
MODULES
NT APOLLO LUNAR EXPERIMENT MODULE
NT COMMAND MODULES
MODULUS OF ELASTICITY
Strength limits correlation to modulus of elasticity for compact bone material from compression tests, noting anisotropy tensor

analysis
p0045 A73-13744
A new method for simultaneous measurement of total respiratory resistance and compliance.
p0084 A73-16799
Torsional elasticity of human skin in vivo.
p0391 A73-41625
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689

MOISTURE CONTENT
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165
Remote detection of water content and spectral properties of leaves in different soybean crop species
p0068 N73-13070

MOL (ORBITAL LABORATORIES)
U MANNED ORBITAL LABORATORIES

MOLECULAR BIOLOGY
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.
p0056 A73-14649
Russian book - Information macromolecules during radiation injury to cells.
p0060 A73-15707
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033
Book - Molecular evolution: Prebiological and biological.
p0089 A73-17926
Life origin on earth, considering hydrocarbon molecules and macromolecular synthesis under earth atmospheric evolutionary conditions
p0089 A73-17928
Atomic, molecular, cellular, genetic, multicellular, neural, mental, social and suprasocial levels of evolution, discussing systems constituents, interactions and selective focus
p0090 A73-17929
Proteins and nucleic acids in prebiotic evolution.
p0090 A73-17937
Model experiments on the prebiological formation of protein.
p0090 A73-17938
Informational biopolymer structure in early living forms.
p0090 A73-17946
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951
Ribosomal RNA base composition and molecular evolution in plants and animals of various taxonomic groups
p0116 A73-19220
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells
p0197 A73-25591
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
Book - Molecular evolution and the origin of life.
p0205 A73-27049
Relationship of theoretical physics to molecular biology, considering synthesis, ontogenesis, phylogenesis, evolution models, thermodynamic applications and Eugen prebiological evolution theory
p0281 A73-31823
Self organized biological systems analysis, including deterministic and phenomenological selection theories, molecular level cell instructive properties and self reproducing hypercycles
p0281 A73-31825
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions
p0426 A73-43929

MOLECULAR BONDS
U CHEMICAL BONDS

MOLECULAR CHAINS
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
Ultraviolet radiation, X rays, freezing, and thawing effects on ribonuclease
p0185 N73-19120

MOLECULAR DIFFUSION
Molecular diffusion model of cardiogenic gas mixing during inspiration at alveolar boundary in dogs
p0323 A73-36652

MOLECULAR EXCITATION
Protein molecules peptide groups excitation interpretation by quantum theory, noting application to muscle contraction
p0159 A73-23297

MOLECULAR INTERACTIONS
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
Life origin hypothesis based on interstellar molecular concentration in gas clouds, examining radical types and molecular Doppler spectra
p0385 A73-41080

MOLECULAR IONS
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin.
p0241 A73-29850

MOLECULAR SIEVES
U ABSORBENTS

MOLECULAR SPECTRA
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145

MOLECULAR STRUCTURE
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599
X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps
p0308 A73-34893
Isocyanide spin label for studying conformational transitions in cytochrome c, emphasizing heme group
[NASA-TT-F-14623] p0065 N73-12099

Molecular organization of active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042
MOLIERE FORMULA
U SPATIAL DISTRIBUTION
MOMENTS
NT DIPOLE MOMENTS
MONAURAL SIGNALS
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
MONITORS
Design and function of sweat sensor to monitor motion sickness sweat response
p0050 A73-14160
The prediction of team monitoring performance under conditions of varied team size and decision rules.
p0081 A73-16710
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Nuclear submarine atmospheric constituent monitoring, covering mass spectrometers, IR carbon monoxide sensors, system development, requirements testing and spacecraft applications
[ASME PAPER 73-ENAS-9] p0349 A73-37970
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] p0259 N73-22045
MONKEYS
Neutron and gamma induced transient incapacitation in conditioned Macaca mulatta
[AD-742076] p0594 N73-10080
Rhesus monkey heart rate during exercise using implanted ECG telemeters
[AD-744930] p0595 N73-10089
High altitude effects on cerebral and cardiovascular systems of monkeys
[AD-745891] p0610 N73-11085
Observation of circulating lymphocytoid cell in monkey after exposure to radio waves
[AD-749583] p0108 N73-15128
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134
Changes in electrocardiographs of Rhesus monkeys as function of age
[NASA-TT-F-14675] p0136 N73-16062
Chemical and orthopedic properties of ceramic bone implants in monkeys
[AD-754982] p0221 N73-20134
Retinal damage in monkeys exposed to near infrared gallium arsenide laser pulses
[AD-753419] p0221 N73-20135
Circadian phase relationships of physiological functions of isolated monkeys subjected to varying photoperiod phases
p0224 N73-21088
Operant behavior of rhesus monkeys in presence of extremely low frequency, low intensity magnetic and electric fields
[AD-754058] p0230 N73-21134
Comparison of electroencephalographic response patterns in man and monkeys to visually evoked cortical stimuli
[IZF-1972-24] p0264 N73-23049
Advantages of breeding Rhesus monkeys in compounds for biomedical research
p0266 N73-23063
Temporary blindness of monkeys caused by combined effects of phosdrin and atropine exposure
[FAA-AM-73-4] p0338 N73-27055
MONOCHROMATIC RADIATION
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
Influence of monochromatic light on physiological processes of blood
[NASA-TT-F-14941] p0297 N73-25111
MONOCULAR VISION
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions
p0046 A73-13764
Monocular and binocular clues interaction in depth perception and spatial orientation, discussing stereopsis testing
p0079 A73-16483
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception
p0121 A73-20262
Eye dominance measurement relationship to image sharpness or visual acuity from binocular and monocular tests, obtaining dominance normal distribution
p0153 A73-21893
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex
p0167 A73-24332
Monocular fixation tests and prediction model for time course of aftereffect of eye turn on autokinetic illusion direction
p0235 A73-28098
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
Extended border enhancement during intermittent illumination - Binocular effects.
p0308 A73-34842
Monocular pilot ability in securing and retaining license as compared to controls
p0387 A73-41163
Mathematical model for physical space transformation into subjective field metric for monocular vision
p0432 A73-44906
Psycho-visual problems associated with monocular, bi-ocular, and binocular visual systems
[AD-749450] p0101 N73-14085
MONOLITHIC CIRCUITS
U INTEGRATED CIRCUITS
MONOPLANES
NT A-7 AIRCRAFT
NT BOEING 720 AIRCRAFT
NT C-135 AIRCRAFT
MONOSACCHARIDES
NT RIBOSE
Absorption of fructose in saline mixture used for enteritis therapy of children
[NASA-TT-F-14596] p0609 N73-11078
MONOTONY
Self-estimates of distractibility as related to performance decrement on task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
Psychobiological factors for predicting monotony tolerance and selecting personnel for isolated duty
[AD-747272] p0071 N73-13098
MONTE CARLO METHOD
Monte Carlo radiation transport computer codes for calculating dose distributions and cell survival probabilities
[NASA-CR-130965] p0176 N73-18127
Monte Carlo simulation for man machine task sequencing considering pilot performance degradation
p0270 N73-23899
MOODS
Effect of mood on testing human performance
p0069 N73-13075
MOON
Search for biogenic structures and viable organisms in lunar samples - A review.
p0094 A73-18416
MORAINAL LAKES
U LAKES
MORALE
Study to validate Non-Interference Performance Assessment
[NASA-CR-128865] p0190 N73-19164
MORPHOLOGICAL INDEXES
Hyperoxic damage in animal cells, tissues, and organs
p0182 N73-19091
MORPHOLOGY
NT ISOMORPHISM
NT LUNG MORPHOLOGY
NT POLYMORPHISM

Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development p0051 A73-14256
The morphological organization of the vertebrate retina. p0160 A73-23304
Morphological changes in the liver of dogs induced by chronic gamma irradiation p0208 A73-27707
Morphological changes in kidneys during exposure to variously oriented accelerations at a level of 4 g for many hours p0304 A73-34226
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation p0305 A73-34230
Book - Pathological effects of radio waves. p0348 A73-37774
Functional morphology of various organs and tissues subjected to space flight [NASA-TT-F-738] p0185 N73-19126
Morphological changes in liver of dogs subjected to chronic gamma radiation p0217 N73-20101
Morphological changes in rat kidneys exposed to different accelerations p0372 N73-29023
Survey of literature and morphological studies of vestibular nerve [NASA-CR-135746] p0445 N73-33042

MORPHOTROPISM
U ISOMORPHISM

MORTALITY
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease. p0242 A73-30051
Risk factors for developing myocardial infarction and other diseases - The 'Men born in 1913' study. p0245 A73-30352
Mortality rate of guinea pigs after decompression treatment as function of water balance [DLR-FB-71-20] p0099 N73-14075
Clinical analysis of relationship between VPB and mortality rate in patient with acute myocardial infractions p0146 N73-17083
Precoronary care and sudden death prevention due to coronary disease in industrial workers p0146 N73-17084
Chronic disease health trends and mortality rates in employee population of NASA Goddard Space Flight Center p0147 N73-17086
Mortality rate in antiradiation drug protected mice subjected to gamma radiation overloads p0214 N73-20079

MOS (SEMICONDUCTORS)
U METAL OXIDE SEMICONDUCTORS

MOSFET
U FIELD EFFECT TRANSISTORS

MOSS (SPACE STATIONS)
U ORBITAL SPACE STATIONS

MOTILITY
U LOCOMOTION

MOTION
Motion cue effects on pilot manual control tracking task p0602 N73-10141
Motion effects in pilot reactions to ground-based flight simulator display evaluation [AD-749370] p0075 N73-13126

MOTION AFTEREFFECTS
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli p0096 A73-18624
Disparity detectors in human depth perception - Evidence for directional selectivity. p0383 A73-40413

MOTION PERCEPTION
U SPACE PERCEPTION

MOTION SICKNESS
Semicircular canals as a primary etiological factor in motion sickness. p0588 A73-12560
Direction-specific adaptation effects acquired in a slow rotation room. p0049 A73-14154
Design and function of sweat sensor to monitor motion sickness sweat response p0050 A73-14160
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft. p0050 A73-14161
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles. p0154 A73-22531
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia p0303 A73-34121
The role of the sympathetic section of the vegetative nervous system in the training of the organism for the influence of statokinetic irritants. p0327 A73-36903
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests p0327 A73-36904
Altered susceptibility to motion sickness as a function of subgravity level. p0358 A73-39486
Analysis of physiological mechanisms contributing to occurrence of motion sickness p0591 N73-10020
Motion sickness effects on flying personnel performance during hurricane penetrations [AD-743928] p0596 N73-10100
Guinea pigs used to determine effect of intramuscular injections of drugs on fall-out and Bekhterev nystagmus occurring after unilateral and bilateral labyrinthectomies p0134 N73-16049
Motion sickness in fixed-base car simulator with moving visual display [FPRC-1310] p0175 N73-18119
Combined stress effects in human communication and motion sickness biodynamics p0188 N73-19144
Predictability of motion sickness in pilot selection - conferences [AGARD-CP-109] p0225 N73-21092
Three different bases for susceptibility prediction to motion sickness p0225 N73-21093
Clinical procedures for selecting pilot personnel based on predisposition to motion sickness p0225 N73-21094
Adaptability and receptivity factors affecting motion sickness susceptibility in pilots p0225 N73-21095
Reaction assessment of vestibular disorientation stress for aircrew selection, using visual displays and tasks p0225 N73-21096
Motion sickness questionnaire and field independence scores as predictors of success in Naval aviation training p0225 N73-21097
Biaxial simulator imposing standardized coriolis stimuli for selection, test, and rehabilitation of motion sick pilots p0225 N73-21098
Physiological method for selecting and observing student pilots in Belgian Air Force for motion sickness p0226 N73-21099
Metixenum and Meclocin under double blind comparison test conditions against motion sickness p0226 N73-21100

MOTION SICKNESS DRUGS
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness p0124 A73-20990
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/. p0154 A73-22529

Prophylaxis and treatment of the motion sickness syndrome
p0240 A73-29410
Effects of antimotion sickness drugs, placebos, and secobarbital on postural equilibrium functions at sea level and at simulated altitudes of 12,000 feet
[AD-748192] p0103 N73-14105
Effectiveness of sodium hydrocarbonate as means for treating and preventing motion sickness
p0135 N73-16057

MOTION STABILITY
NT AERODYNAMIC STABILITY
NT HOVERING STABILITY

MOTIVATION
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Motivational patterns underlying devolunteering by submarine graduate school personnel
[AD-749324] p0260 N73-22054
Theoretical analysis of motivation stimulation
p0448 N73-33062
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
Use of motivational relations to find acceptor of action with conditioned stimuli
p0448 N73-33064

MOTOR SYSTEMS (BIOLOGY)
U EFFERENT NERVOUS SYSTEMS

MOTORS
NT SERVOMOTORS

MOUNTAIN INHABITANTS
High altitude adaptation in mountain inhabitants of Tian Shan and Pamir, discussing effects on hemodynamic and pulmonary functions
p0584 A73-11922
Hemocoagulation system function in mountain inhabitants and during altitude acclimatization, noting parasympathetic nervous system tonus
p0584 A73-11923
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
Mountain inhabitants physiological characteristics due to altitude effects, investigating human tolerance and adaptation to ambient environment
p0116 A73-19212
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy
p0168 A73-24514
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217

MOUNTAINS
Physiological effects of high mountain alpinism exercises on human body
p0135 N73-16058
Atherosclerosis and hypertonia under high mountain conditions and seasonal effects
[NASA-TT-P-745] p0176 N73-18121
Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat
p0378 N73-29335

MUD
Biogeochemistry of aragonite mud and oolites.
p0056 A73-14662

MULTICHANNEL COMMUNICATION
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277
Multichannel PDM-FM biomedical radio telemetry system for ECG, respiratory rate and oxygen consumption during exercise, considering transmitter and receiver design
p0052 A73-14278
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280
Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284
Three channel FM telemetry system for long term EEG monitoring, discussing routine clinical operation results
p0054 A73-14298
Surgically implanted single and multichannel telemetry systems for monitoring single and multiple physiological parameters, discussing size and power requirements
p0054 A73-14302
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
Miniature biotelemeter giving 10 channels of wideband biomedical data.
p0058 A73-15388
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] p0259 N73-22045

MULTICHANNEL RECEIVERS
U MULTICHANNEL COMMUNICATION

MULTICHANNEL TRANSMITTERS
U MULTICHANNEL COMMUNICATION
U TRANSMITTERS

MULTIPLETS
U FINE STRUCTURE

MULTIPLEXING
NT TIME DIVISION MULTIPLEXING

MULTIPROPELLANTS
U ROCKET PROPELLANTS

MULTISPECTRAL PHOTOGRAPHY
NT INFRARED PHOTOGRAPHY
Multispectral remote sensing techniques for identification of corn blight disease
[NASA-TM-X-69055] p0136 N73-16064
Multispectral remote sensing techniques applied to study changes in wildlife habitats
p0142 N73-16396

MULTIVARIATE STATISTICAL ANALYSIS
NT BIVARIATE ANALYSIS
NT ORTHOGONALITY
NT REGRESSION ANALYSIS
Predicting coronary heart disease.
p0244 A73-30351
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.
p0399 A73-42341
Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578
Multivariate limits for describing cockpit related anthropometric features of aviation personnel
[AD-752032] p0151 N73-17124
Statistical analysis of NASA multivariate spectrum analysis program performance after modifications
[NASA-CR-134011] p0417 N73-30995

MUSCLES
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
Oxidation effects on rate of C 14-labeled leucine incorporation into rat skeletal muscle protein
p0077 A73-16152
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135

Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness
p0280 A73-31515
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799
Continual mechanochemical model of muscular tissue
p0381 A73-40182
Adenin-nucleotides NAD(plus) and NADN in skeletal muscles during intensive work and at rest [NASA-TT-F-14856]
p0219 N73-20118
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
Recording human electroencephalogram under influence of muscle noise
p0443 N73-33025

MUSCULAR FATIGUE
Energy cost of muscle work in a state of fatigue
p0080 A73-16697
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
Oxygen consumption alteration effects on human endurance capacity as function of relative work, muscle blood flow and anaerobic metabolism
p0241 A73-29753
Erythrocyte volume in acidified venous blood from exercising limbs.
p0436 A73-45557

MUSCULAR FUNCTION
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles
p0576 A73-10155
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle.
p0580 A73-10774
Microvascular responses to alterations in oxygen tension.
p0581 A73-11010
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166
Spontaneous middle ear muscle activity in man - A rapid eye movement sleep phenomenon.
p0587 A73-12423
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
EMG measurement on male adults for muscular relaxation reaction time interval from light stimulus onset to elbow flexor response
p0045 A73-13699
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
Telemetry methods for maximum static muscle strength measurements, considering dynamic force measurement possibilities
p0054 A73-14296
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
Mechanical modeling of eye muscle dynamics.
p0097 A73-18816
Adenonucleotides, NAD+, and NADN in skeletal muscles during intensive work and at rest
p0116 A73-19475
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036
The interaction between muscle groups in a complex motor act in humans
p0125 A73-21320
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold
p0126 A73-21323
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow
p0126 A73-21375
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
Effect of copper ions on the functional state of the neuromuscular apparatus
p0154 A73-22369
Organization of spontaneous muscular activity in man
p0157 A73-22863
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934
Protein molecules peptide groups excitation interpretation by quantum theory, noting application to muscle contraction
p0159 A73-23297

Changes in gaseous metabolism and cardiac output per minute during local muscle work in man p0164 A73-23809
Electromyographic alterations in articular muscles during emotional shifts p0167 A73-24328
Rise time of the spike potential in fast and slowly contracting muscle of man. p0168 A73-24500
Voluntary activation of individual motor units in man p0168 A73-24519
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress p0169 A73-24522
Reflex reaction of antagonist muscles during an evoked tendon reflex p0170 A73-24598
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle p0170 A73-24599
The nature of the optimum muscular performance achieved in the execution of fast eye rotations. p0171 A73-24772
Calcium movements and excitation-contraction coupling in cardiac cells. p0198 A73-25601
Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus p0199 A73-26087
A new phenomenon of an active intraorgan pumping function of skeletal muscles p0206 A73-27446
Heart function mechanism explanation by activation potential stimulation of muscular contraction via calcium ions p0207 A73-27690
Effect of adaptation to cold on the energy characteristics of muscular activity p0235 A73-28295
Exogenous free fatty acid effects on hypoxic myocardial function in isolated isometric rat papillary muscles p0241 A73-29572
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/ p0249 A73-30843
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads. p0250 A73-30880
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/ p0279 A73-31504
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs p0279 A73-31505
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads p0322 A73-36570
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity p0322 A73-36571
Changes in respiration effectiveness during muscular activity p0323 A73-36580
Ribes Nigrum anthocyanosides in ophthalmology p0330 A73-36935
The capacity for muscular work in acute hypoxia p0331 A73-36946
Electromyographic study of repetitive fasciculation potentials in triceps and adductor pollicis in normal subjects and patients with motor neuron diseases, noting postcontraction pause p0359 A73-39761
Variations in the motor potential with force exerted during voluntary arm movements in man. p0385 A73-41013
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle. p0385 A73-41130
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man. p0385 A73-41131
Effect of training with eccentric muscle contractions on skeletal muscle metabolites. p0390 A73-41523
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle. p0391 A73-41624
Investigation of the nature of biological rhythm sensors by means of automatic networks p0393 A73-41865
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man p0401 A73-42658
Reflex arch lability in rabbits at synchronous maximum frequency of electromyographic and muscle stretching vibration measurement p0401 A73-42659
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism p0402 A73-42660
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity. p0403 A73-42679
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload. p0404 A73-42688
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog p0407 A73-42973
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles p0429 A73-44670
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations p0429 A73-44673
Nonlinear model relating neural input to force and muscle contraction in human ankle joint p0599 N73-10117
Tracking tests as quantitative measurements of neuromuscular functions in clinical applications p0599 N73-10118
Hypoxia effects on human gastric motor functions in pressure chamber experiments using electrogastrography p0064 N73-12085
Skylab experiments to assess weightlessness effects on human nutritional metabolism and musculoskeletal function p0175 N73-18115
Exercise and muscle stimulation for preventing metabolism changes during bed rest p0256 N73-22019
Depressing effect of hypokinesia on rat skeletal muscle functions p0262 N73-23028
Functional disturbances during hypokinesia in man [NASA-TT-F-15148] p0450 N73-33073

MUSCULAR STRENGTH

Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles p0576 A73-10155
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion p0080 A73-16696
Human factors engineering to determine maximum control forces capability of female pilots [FAA-AM-72-27] p0112 N73-15157

MUSCULAR TONUS

Cerebral circulation alteration during hypothermia p0081 A73-16698
Action of a serum protein on muscular contraction. p0125 A73-21200
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles

p0165 A73-23810
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603
Human sensorimotor coordination following space flights.
p0397 A73-42170
Action of stable and pulsed noise on the processes of skeletal muscle excitation
p0402 A73-42662
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
Evoked compensatory reflex reactions of rabbit ocular and eyelid muscles during hypoxia
p0253 N73-21992
Basic causal mechanisms responsible for loss of vascular tone during alterations in shifts to zero gravity
[NASA-CR-128897] p0267 N73-23069

MUSCULOSKELETAL SYSTEM
NT BONES
NT CEREBRUM
NT COLLAGENS
NT CONNECTIVE TISSUE
NT CRANIUM
NT ELBOW (ANATOMY)
NT FLEXORS
NT INTRACRANIAL CAVITY
NT JOINTS (ANATOMY)
NT KNEE (ANATOMY)
NT MARROW
NT PELVIS
NT SKULL
NT ULNA
NT VERTEBRAE
NT VERTEBRAL COLUMN
Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle
p0581 A73-11023
Reduced dimensionality for minimization of degrees of freedom of skeletal activity models for anthropomorphic locomotion system synthesis
p0581 A73-11052
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
A new phenomenon of an active intraorgan pumping function of skeletal muscles
p0206 A73-27446
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/
p0279 A73-31504
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization.
p0287 A73-33161
Prolonged space flight and hypokinesia.
p0325 A73-36789
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943
Volume-pressure characteristics of rib cage-diaphragm interaction in standing subjects during voluntary relaxation
p0359 A73-39778
Action of stable and pulsed noise on the processes of skeletal muscle excitation
p0402 A73-42662
Age-dependent characteristics of myoglobin content and distribution in the heart and skeletal muscles
p0429 A73-44669
Quantitative description of mobility for human torso
[AD-754924] p0223 N73-20151
Blood supply to skeletal muscles of rats during hypokinesia
p0442 N73-33018

MUTATIONS
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
International literature survey of microbiological space research for 1930-1970, discussing high altitude balloon, rocket and satellite experiments, weightlessness effects, mutagenesis, etc
p0279 A73-31501
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
Heavy ion irradiation effects on bacteria mutations in balloon flight and accelerator experiments, comparing with cosmic rays
p0399 A73-42184
Observation of circulating lymphocytoid cell in monkey after exposure to radio waves
[AD-749583] p0108 N73-15128
Biostatistics of genetical processes in human populations
[NASA-CR-131508] p0229 N73-21131
Ability of organism to maintain normal physiological activities in bioregenerative system
[NASA-CR-130807] p0252 N73-21979
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107

MYOCARDIAL INFARCTION
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
Book - Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction.
p0201 A73-26287
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
Risk factors for developing myocardial infarction and other diseases - The 'Men born in 1913' study.
p0245 A73-30352
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
Diagnostic power of the Q wave - Critical assay of its significance in both detection and localization of myocardial deficit.

p0319 A73-36527
Coronary atherosclerosis and ischemic myocardial damage.
p0320 A73-36538
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540
Clinical manifestations of acute myocardial infarction.
p0321 A73-36543
Electrocardiographic diagnosis of myocardial infarction - Pitfalls of a graphic technique.
p0321 A73-36544
Cell viability in acute myocardial infarction, discussing pathogenesis, histological, histochemical and biochemical responses to ischemia, homeostasis maintenance and treatment methods
p0321 A73-36545
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations
p0321 A73-36546
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547
Evaluation, diagnosis and treatment of common structural complications of acute myocardial infarction.
p0321 A73-36548
The prognosis of myocardial infarction.
p0321 A73-36549
Responsibility for ischemic cardiopathies in civil aviation flight personnel
p0327 A73-36902
A diagnostic program - Problems of predicting myocardial infarction on a digital computer
p0354 A73-38998
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000
The complications of coronary arteriography.
p0399 A73-42343
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease.
p0405 A73-42829
Myocardial infarction susceptibility correlated with psychosocial factors in life change measurement studies
p0405 A73-42833
Electrocardiographic stress testing for determining influence of occupational and other stresses on ischemic heart disease
p0146 N73-17082
Clinical analysis of relationship between VPB and mortality rate in patient with acute myocardial infractions
p0146 N73-17083
Myocardial changes in flying personnel exposed to hypoxic hypoxia
p0253 N73-21985
Microscopic morphological changes in dog cardiac muscle after chronic gamma irradiation
p0372 N73-29027

MYOCARDIUM
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
High energy phosphate deficit-produced myocardial cell genetic apparatus activation as cardiac hypertrophy mechanism, discussing mitochondrial biogenesis and cardiac hyperfunction roles
p0588 A73-12511
Relationship of anginal symptoms to lung mechanics during myocardial ischemia.
p0589 A73-12820
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
Evaluation of cardiac performance in exercise.
p0043 A73-13539
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
Assessment of hypoxia in the human heart.
p0118 A73-19928
The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
Myocardial metabolism during exposure to carbon monoxide in the conscious dog.
p0159 A73-22935
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships
p0197 A73-25590
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells
p0197 A73-25591
Ionic current mechanisms for cardiac muscle repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies
p0197 A73-25593
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport
p0197 A73-25594
Cardiac membrane capacitance physiological properties and measurements in Purkinje fibers, ventricular and atrial muscles and heart tissues
p0197 A73-25596
Vertebrate cardiac innervation via parasympathetic and sympathetic nervous system, considering synaptic transmission, nerve endings, stimulation and electrical effects
p0198 A73-25597
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions
p0198 A73-25598
Neurogenic and myogenic mechanisms of myocardium cell electrical activity and excitation in vertebrate and invertebrate neural and muscle tissues

p0198 A73-25599
Physical/electrical sealing mechanisms of myocardiac and muscle fiber healing after surface injury, considering ionic factors, sodium and calcium rates and contraction relation
p0198 A73-25600
Calcium movements and excitation-contraction coupling in cardiac cells.
p0198 A73-25601
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026
Heart function mechanism explanation by activation potential stimulation of muscular contraction via calcium ions
p0207 A73-27690
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
Exogenous free fatty acid effects on hypoxic myocardial function in isolated isometric rat papillary muscles
p0241 A73-29572
German monograph - Comparative investigations regarding the phenomenon of force potentiation in the case of the heart muscle of cold-blooded and warm-blooded animals.
p0249 A73-30689
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
Effect of maximal work load on cardiac function.
p0288 A73-33991
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation
p0305 A73-34230
Factors influencing coronary blood flow in the presence of coronary obstructive disease.
p0321 A73-36539
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain
p0389 A73-41278
A simple cardiac contractility computer.
p0403 A73-42677
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834
Age-dependent characteristics of myoglobin content and distribution in the heart and skeletal muscles
p0429 A73-44669
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400
Alterations in myocardial contractility induced by bed rest
[NASA-CR-128968] p0333 N73-26056

MYOELECTRIC POTENTIALS
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
Voluntary activation of individual motor units in man
p0168 A73-24519
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle
p0170 A73-24599
Embryonic chick heart cell age dependent electrophysiological studies, discussing structure, metabolism, ATPase activity, membrane potential and cell interactions
p0197 A73-25589
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships
p0197 A73-25590
Cardiac action potential rising phase and generation mechanism, discussing pacemaker potential and slow depolarization initiating upstroke in spontaneously active cardiac cells
p0197 A73-25592
Ionic current mechanisms for cardiac muscle repolarization time course of Purkinje fibers and other heart cells, relating charge transfer data to earlier studies
p0197 A73-25593
Electrogenic potassium inward transport involvement in mechanism of enhanced repolarization, correlating cardiac excitation with Na, K and Ca ion transfers and active ion transport
p0197 A73-25594
Sinoatrial node pacemaker cell functions, discussing ionic and metabolic principles, electrical activity, membranal effects of neurohormonal control factors and cardioactive drug effects
p0197 A73-25595
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions
p0198 A73-25598
Neurogenic and myogenic mechanisms of myocardium cell electrical activity and excitation in vertebrate and invertebrate neural and muscle tissues
p0198 A73-25599
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve

p0276 A73-31166
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799
Electromyographic study of repetitive fasciculation potentials in triceps and adductor pollicis in normal subjects and patients with motor neuron diseases, noting postcontraction pause
pG359 A73-39761
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42679
Bioelectric control system design for reversible slave mechanism manipulator using single muscle input
p0336 N73-26088
Motor function modeling of human arm by manipulator using myoelectric control pulses
p0336 N73-26091

MYOELECTRICITY
NT MYOELECTRIC POTENTIALS
Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles
p0576 A73-10155
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle.
p0580 A73-10774
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold
p0126 A73-21323
Cardiac membrane capacitance physiological properties and measurements in Purkinje fibers, ventricular and atrial muscles and heart tissues
p0197 A73-25596
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/
p0249 A73-30843
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
Metabolic and myoelectric reactions under chemical thermoregulation in rats after accelerated cold adaptation
p0430 A73-44721

MYOGLOBIN
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Age-dependent characteristics of myoglobin content and distribution in the heart and skeletal muscles
p0429 A73-44669

N

NARCOSIS
Effects of vagotomy on the impulse activity of respiratory neurons
p0276 A73-31160
Mechanism of inert gas narcosis in human body and mice
[NASA-CR-62096] p0445 N73-33038

NARCOTICS
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391
Chromatographic and polarographic methods for determining metabolic levels of hypnotic drugs in blood plasma and urine of man
p0228 N73-21118
Incidence of abnormal liver function tests in drug addicts without history of jaundice
[NASA-TT-F-15041] p0374 N73-29044

NASA PROGRAMS
NT APOLLO PROJECT
NT SKYLAB PROGRAM
NT TEKTITE PROJECT
NT VIKING MARS PROGRAM
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs
p0050 A73-14168
Sterilization technology in the United States space program.
p0288 A73-33697
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Medical concepts and functional management in NASA Environmental Health Program
p0143 N73-17056
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program
p0143 N73-17057
Environmental health measures to prevent cabin atmosphere toxicity and provide drinking water standards in manned space flight applications
p0144 N73-17058
Routine proctosigmoidoscopic examinations of asymptotic NASA personnel for cancer prevention
p0144 N73-17061
Mental health services for emotional counselling in NASA facilities to insure maximum human performance
p0144 N73-17062
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
Long term exercise effects on cardiovascular response in NASA personnel with periodic ergometric evaluation
p0145 N73-17067
Computerized multivariate scheduling of physical examinations for NASA personnel in clinical intervention program
p0145 N73-17068
Physical exercise effects on health of NASA personnel
p0145 N73-17069
Continuous monitoring of hypertension and hypercholesterolemia in NASA employees for prevention of heart disease and disability
p0145 N73-17072
Conference on occupational and environmental medical services provided to NASA employees
[NASA-TM-X-69074] p0146 N73-17078
Influence of repeated test and dietary counseling on hypercholesterolemia control in NASA employees
p0146 N73-17081
Feasibility of effective exercise and health evaluation and enhancement program for NASA employees
p0147 N73-17091
Influence of NASA stress lab program on physical education in US colleges
p0147 N73-17092
Development of electrocardiogram protection circuits to prevent accidental electrocution and digital cardiotachometer system to display heart

rate
p0261 N73-22924
Development and evaluation of free flying teleoperators to include semiexoskeletal master control unit, joystick-analog unit, and three dimensional television system
p0261 N73-22925
NASA programs on life science research in aerospace environments, emphasizing cardiovascular system
p0265 N73-23058
NASA supported research in photobiology and photochemistry from 1966 to 1973
[NASA-CR-133459] p0365 N73-27937
Medically related NASA technology applications and transfer activities
[NASA-CR-135527] p0418 N73-31001

NATURAL FREQUENCIES
U RESONANT FREQUENCIES

NATURAL SATELLITES
NT MOON
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116

NAUSEA
Analysis of physiological mechanisms contributing to occurrence of motion sickness
p0591 N73-10020

NAVIGATION
NT AIR NAVIGATION

NAVIGATION AIDS
NT RADIO DIRECTION FINDERS

NAVIGATION INSTRUMENTS
NT ATTITUDE INDICATORS
NT RADIO DIRECTION FINDERS

NAVIGATORS
Color aptitude of dyschromatopsia French navigators and pilots
p0179 N73-19068
Influence of long duration flight missions on metabolic and endocrine functions of pilots and navigators
p0189 N73-19152

NECK (ANATOMY)
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
Vestibular and spinal control of eye movements.
p0316 A73-36440
Biodynamic response of human head and neck to impact acceleration
[AD-747988] p0072 N73-13106
Mass, volume, center of mass, and mass moment of intertia determined for head and neck of human body
[AD-762581] p0377 N73-29065

NEGATIVE FEEDBACK
NT SENSORY FEEDBACK

NEOPLASMS
NT CANCER

NERVES
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements
p0060 A73-15787
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex
p0167 A73-24332
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Neuroanatomy of the auditory system.
p0244 A73-30280
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372
Computer acquisition of multiunit nerve-spike signals.
p0403 A73-42671
Neural model as pulse interval processor
[AD-746007] p0606 N73-10169
Vestibular function loss in man after unilateral section of eighth cranial nerve
[NASA-CR-129672] p0070 N73-13084

NERVOUS SYSTEM
NT AFFERENT NERVOUS SYSTEMS
NT AUTONOMIC NERVOUS SYSTEM
NT AXONS
NT BRAIN
NT BRAIN STEM
NT CENTRAL NERVOUS SYSTEM
NT CEREBELLUM
NT CEREBRAL CORTEX
NT CEREBRUM
NT DIENCEPHALON
NT EFFERENT NERVOUS SYSTEMS
NT GANGLIA
NT HIPPOCAMPUS
NT NERVES
NT NEUROGLIA
NT NEURONS
NT PERIPHERAL NERVOUS SYSTEM
NT SPINAL CORD
NT SPINE
NT SYMPATHETIC NERVOUS SYSTEM
NT SYNAPSES
NT THALAMUS
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Comparative anatomy of the vestibular nuclear complex in submammalian vertebrates.
p0096 A73-18575
Structural models of simple sensory motor co-ordination.
p0098 A73-18890
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
Book - Sensory coding in the mammalian nervous system.
p0199 A73-25799
Vector correlation theory and neural mechanisms of binaural signal detection in human auditory system
p0244 A73-30283
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism
p0281 A73-31875
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli

p0322 A73-36577
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
Visual perception dominance over touch related to threshold changes, analyzing nervous system reliance on sense with lower threshold
p0425 A73-43847
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
Neuroelectric oscillation in two parallel, single-unit pathways feeding back on single primary cell
[B-984-RC] p0070 N73-13083
Nervous system functional changes due to forces of acceleration and weightlessness
[NASA-TT-F-733] p0148 N73-17105
Radioimmunoassays of plasma aldosterone and catecholamine concentrations as human vasomotor regulators
p0174 N73-18111
Influence of light flashes from heavy ionizing particles on astronaut nervous system
[LBL-1011] p0186 N73-19134
Masking phenomenon for measuring state of fatigue and stress of nervous system
[AD-752975] p0300 N73-25129

NEURAL NETS
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures
p0060 A73-15789
A model of a memory device based on neuron-like elements which realizes the holographic principles of data recording and readout
p0061 A73-15792
Human memory model with associative linkage between neuronal network information elements
p0061 A73-15797
Space-time dynamics of the impulse activity in human-brain neuron populations
p0080 A73-16692
Information processing in the visual system.
p0122 A73-20374
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535
Neuroanatomy of the auditory system.
p0244 A73-30280
Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection
p0248 A73-30568
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569
Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Correlative function formalism for neuron networks with limited communication channels and active-refractive-storing signal action
p0389 A73-41277
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902
Probability estimate models for reliable function of redundant systems with adaptable and inadaptable neuron-like restoration organs
p0431 A73-44904
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912

NEUROGLIA
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429

NEUROLOGY
Neurological fatigue-indices of flight crews of long-range and military transport aviation
p0193 A73-25040
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach.
p0196 A73-25342
Human visual system model based on neurological connectivity data from anatomical dissection, in vivo physiological measurements and psychological experimentation
p0309 A73-35239
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
Studies concerning high pressure hyperexcitability in Squirrel Monkey
[AD-745779] p0610 N73-11086

NEUROMUSCULAR TRANSMISSION
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409
Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle
p0581 A73-11023
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation
p0046 A73-13786
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles
p0084 A73-16735
Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
Pathological cardiac conduction system lesions anatomy associated with arrhythmia, discussing atrioventricular, His bundle and bundle branch blocks
p0097 A73-18872
Cardiac arrhythmias generation by impulse initiation and conduction abnormalities, considering depressed excitability, reentrant excitation, summation, inhibition and parasystole
p0097 A73-18874
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funicuis of the cat spinal cord

p0118 A73-20002
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004
Ontogenic cerebrospinal reflex activity studies, covering spinal cord morphology, reflex arches, inhibition, intracentral responses and post-tetanic potentiation
p0121 A73-20366
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold
p0126 A73-21323
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
Effect of copper ions on the functional state of the neuromuscular apparatus
p0154 A73-22369
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579
Organization of spontaneous muscular activity in man
p0157 A73-22863
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517
Voluntary activation of individual motor units in man
p0168 A73-24519
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle
p0170 A73-24599
Functional and morphological structures of motor activity events, noting central integration ensemble of cerebrum transmitter sequences
p0194 A73-25200
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
Morphological and experimental excitation models of cardiac muscle ultrastructure, transmission activity and intercellular contact relationships
p0197 A73-25590
Vertebrate cardiac innervation via parasympathetic and sympathetic nervous system, considering synaptic transmission, nerve endings, stimulation and electrical effects
p0198 A73-25597
Cardiac activity potentials, P-R interval and impulse propagation across atrioventricular node, ventricular conduction and Purkinje fiber-muscle junctions
p0198 A73-25598
Neurogenic and myogenic mechanisms of myocardium cell electrical activity and excitation in vertebrate and invertebrate neural and muscle tissues
p0198 A73-25599
Motor functions and control of sensorial messages of somatic origin
p0240 A73-29174
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man
p0249 A73-30845
Anatomo-functional bases of cerebello-cerebral interrelations
p0282 A73-32287
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434
The neuronal mechanism of nystagmus.
p0316 A73-36437
Supranuclear structures regulating binocular eye and head movements.
p0317 A73-36451
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780
Russian book - Electrical activity of the human brain in the process of motor action.
p0389 A73-41289
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents
p0401 A73-42652
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690
Signal and noise in the human oculomotor system.
p0407 A73-42964
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249
Nonlinear model relating neural input to force and muscle contraction in human ankle joint
p0599 N73-10117
Tracking tests as quantitative measurements of neuromuscular functions in clinical applications
p0599 N73-10118
Respiratory impedance effects on electrical activities of bulbar respiratory neurons, respiratory muscles, and pulmonary ventilation in anesthesized cats
p0064 N73-12084
Hypoxia effects on human gastric motor functions in pressure chamber experiments using electrogastrography
p0064 N73-12085

Workload effects on operator grip pressure and neuromuscular transmission in manual tracking task error
[AD-757252] p0269 N73-23089
NEURON TRANSMISSION
U BIOELECTRICITY
NEURONS
Neuron networks modeling from viewpoint of intracellular and cell-medium interaction, discussing coding properties and nonsingular self adjusting system response
p0579 A73-10652
Computerized correlation analysis of single and multiple neuron pulse activity, considering temporal, sequential and entropy characteristics
p0579 A73-10653
Complex processing of discrete biological information
p0580 A73-10662
Y-chromosome localization in the interphase nuclei of cerebral neurons in man
p0582 A73-11444
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation
p0046 A73-13786
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
Responses of bulbar respiratory neurons to apparatus-aided artificial respiration
p0081 A73-16699
Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683
Neural channel mechanism for real light and equivalent background coding, using test flashes under bleaching and field adaptation
p0121 A73-20258
Structural characteristics of connections between medial efferent systems and spinal cord neurons
p0156 A73-22577
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802
Role of the medial area of the medulla oblongata in the rhythmical activity of respiratory-center neurons
p0164 A73-23804
Neuron analyzer technique for poststimulus histogram plotting of neuron excitation as function of stimulus onset time
p0165 A73-23811
Amplitude discriminator with variable effective range design for use with/without digital computer in neuron pulsed activity analysis
p0168 A73-24516
Voluntary activation of individual motor units in man
p0168 A73-24519
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors
p0199 A73-26086
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353
Intranuclear organization of the center median nucleus of the thalamus.
p0240 A73-29175
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825
Effects of vagotomy on the impulse activity of respiratory neurons
p0276 A73-31160
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286
Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
The visual cortex as a spatial frequency analyser.
p0308 A73-34840
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442
Neuronal elements of the orienting response - Microrecordings and stimulation experiments in rabbits.
p0316 A73-36444
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.

p0317 A73-36454
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600
Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601
Computer controlled automatic TV-microscope system for tracking and measuring nerve cell processes in designated axons and dendrites
p0359 A73-39763
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283
Correlative function formalism for neuron networks with limited communication channels and active-refractive-storing signal action
p0389 A73-41277
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man
p0401 A73-42656
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons.
p0424 A73-43338
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249
Dynamic response of vestibular nuclei neurons of decerebrated cats subjected to sinusoidal rotation [AMRU-R-70-2]
p0606 N73-11059
Asymmetric response of cat semicircular canal neurons to symmetric sinusoidal rotation [AMRU-R-69-2]
p0607 N73-11060
Respiratory impedance effects on electrical activities of bulbar respiratory neurons, respiratory muscles, and pulmonary ventilation in anesthesized cats
p0064 N73-12084
Evolution of neural messages in human adaptation to prolonged zero gravity flight
p0111 N73-15154
Neuronal changes in cortical motor region cells during pharmacological induced sleep
p0257 N73-22028
Frequency selectivity and two tone inhibition in neural coding of acoustic stimuli [IZF-1972-25]
p0264 N73-23050
Mathematical simulation study of neuron response to vestibular analyzer exposed to periodically varying acceleration [NASA-TT-F-15130]
p0420 N73-31015
Change in impulse activity of neurons in respiratory center during electric stimulation of vestibular nerve and dorsal roots in spinal cord
p0442 N73-33017

NEUROPHYSIOLOGY

Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
Structural organization and electrophysiological properties of the intercentral functional systems of the hypothalamic region of the brain
p0581 A73-11024
Inhibitive mechanisms activity in behavior control by neostriatum, discussing suppressive reactions, evoked sleep, conditioned and instrumental reflexes and neurophysiological aspects
p0581 A73-11025
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development
p0051 A73-14256
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257
Nervous system transmitter biochemistry in terms of excitation and inhibition coordination with emphasis on gamma-aminobutyric acid /GABA/ function in cerebellum
p0051 A73-14258
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements
p0060 A73-15787
Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Space-time dynamics of the impulse activity in human-brain neuron populations
p0080 A73-16692
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
The control of sensitivity in the retina.
p0097 A73-18673
Electrophysiological investigation of suprasegmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics
p0118 A73-20001
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funiculs of the cat spinal cord
p0118 A73-20002
Rabbit hippocampal neuron activity relation to theta-wave phases from cell potential and extracellular recording analyses
p0118 A73-20005
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802

Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing
p0194 A73-25143
Functional and morphological structures of motor activity events, noting central integration ensemble of cerebrum transmitter sequences
p0194 A73-25200
Neurogenic and myogenic mechanisms of myocardium cell electrical activity and excitation in vertebrate and invertebrate neural and muscle tissues
p0198 A73-25599
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers
p0242 A73-29875
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection
p0248 A73-30568
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Supranuclear connections to oculomotor nuclei in terms of stimulus relation to eye movements
p0316 A73-36435
The neuronal mechanism of nystagmus.
p0316 A73-36437
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454
Monkey rod receptor potential suppression at photopic stimulus intensities by neurophysiological inhibitory mechanism for clearing cone initiated visual pathway
p0345 A73-37412
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
Investigation of the geometry of the dendritic tree of retinal ganglion cells
p0349 A73-37944
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
Electromyographic study of repetitive fasciculation potentials in triceps and adductor pollicis in normal subjects and patients with motor neuron diseases, noting postcontraction pause
p0359 A73-39761
Functional properties of auditory cortex neurons in a controlled experiment
p0362 A73-39802
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus
p0362 A73-39803
Successive differentiation of visual stimuli in monkeys under various conditions of presentation
p0363 A73-39805
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
The psychophysical inquiry into binocular summation.
p0388 A73-41187
Russian book on structural and functional plasticity of interneuron synapses during readjustment to chemical and physical damage covering degenerative and regenerative changes
p0389 A73-41280
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958
Stimulus specificity in the human visual system.
p0407 A73-42960
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation
p0428 A73-44550
Anatomic and functional organization of the ventral anterior and reticular nuclei of the thalamus
p0429 A73-44675
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Ventilation at transition from rest to exercise.
p0436 A73-45375
Neurophysiology and dynamic response of vestibular system to angular and linear acceleration [DR-215]
p0606 N73-11057
Clinical neurological and neurophysiological aspects of vestibulo-ocular reflex
p0110 N73-15145
Electropolygraphic analyses of sleep patterns in humans with neurological disorders
p0257 N73-22024

NEUROPSYCHIATRY
Psychoneurological problems in adaptation by man to modified diurnal regimes
p0444 N73-33031

NEUROSCIENCE
U NEUROLOGY

NEUROSES
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis
p0092 A73-18163
Characteristics of the higher nervous activity of monkeys during a postneurotic period
p0206 A73-27108

Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129

NEUTRAL PARTICLES
NT FAST NEUTRONS
NEUTRON ACTIVATION ANALYSIS
Neutron activation analysis of cosmic radiation doses in Apollo 14, 15, and 16 astronauts
[NASA-CR-131984] p0267 N73-23070
NEUTRON IRRADIATION
Antiradial properties of DNA and of its denaturation products
p0098 A73-18875
Dosimetric determination of absorbed gamma and neutron radiation on human phantom
[AD-743005] p0593 N73-10077
Neutron and gamma induced transient incapacitation in conditioned Macaca mulatta
[AD-742076] p0594 N73-10080
Effectiveness of pharmacochemical protective substances on irradiated mice as neutron component increases
[DRIC-TRANS-2961] p0108 N73-15124
Mortality and blood cell count variation in mice after irradiation with fast neutrons and X rays
[BMVG-FBWT-72-16] p0138 N73-16077
Calcium metabolism determination in rats by measuring argon isotope in exhaled air after neutron irradiation
[NASA-CR-128816] p0186 N73-19130
Effectiveness of combined chemical protectors against mixed gamma-neutron radiation with neutron contributions to absorbed dose
p0212 N73-20068
Influence of head and stomach shielding on radiation sickness and animal survival from gamma-neutron irradiation
p0213 N73-20071
Characteristics of pathomorphological changes in rat internal organs subjected to gamma-neutron irradiation with head and stomach shielded
p0214 N73-20077

NEUTRONS
NT FAST NEUTRONS
NIGHT VISION
Psychophysical effects of night vision perceptual contrast in terms of central visual receptive field organization
p0046 A73-13759
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Perceptual considerations for a wide field of view, helicopter night landing system /HENILAS/.
p0081 A73-16705

NITRATES
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae.
p0287 A73-33226
Ammonifying ability of denitrifying bacteria of species pseudomonas fluorescens
[NASA-TT-F-15086] p0412 N73-30068
NITRILES
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319

NITRITES
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae.
p0287 A73-33226

NITROBACTER
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490

NITROGEN
Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis.
p0094 A73-18336
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere
p0123 A73-20979
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463
Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069

NITROGEN COMPOUNDS
NT ACETANILIDE
NT AMMONIA
NT ATROPINE
NT AZO COMPOUNDS
NT HYDROCYANIC ACID
NT HYOSCINE
NT ISOCYANATES
NT NITRATES
NT NITRITES
NT NITROGEN OXIDES
NT THIURONIUM
NT TRYPTOPHAN
NT UREAS
Dynamics of nitrogenous cerebral metabolites accompanying repeated hypothermia and subsequent self-heating
p0216 N73-20097

NITROGEN METABOLISM
Nitrogen metabolite dynamics in the brain during repeated hypothermia and subsequent spontaneous warming
p0207 A73-27703

NITROGEN OXIDES
Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants
[AD-751438] p0139 N73-16084
Nitroxide free radicals as spin labels in biochemical systems
[NASA-TT-F-14866] p0220 N73-20125
NOBLE GASES
U RARE GASES
NOCTILUCENCE
U LUMINESCENCE
NOISE (SOUND)
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT SONIC BOOMS
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
Impairment to hearing from exposure to noise.
p0287 A73-33676

A model of psychological annoyance of noise.
p0311 A73-35627
Noise and blast environments providing definition of units and techniques of noise measurement and giving booster-launch and spacecraft noise data
p0106 N73-15106
Speech discrimination by personnel with hearing loss at 3 kHz in noise
[AD-752974] p0298 N73-25118
NOISE ATTENUATION
U NOISE REDUCTION
NOISE ELIMINATION
U NOISE REDUCTION
NOISE HAZARDS
U HAZARDS
U NOISE (SOUND)
NOISE INJURIES
Electron-microscopy investigation of Corti's organ after noise trauma
p0078 A73-16333
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678
Hearing conservation studies covering impulse noise produced threshold shift, damage risk criteria, ultrasound hazards and hearing protection
p0309 A73-35326
Impulse noise damage risk criteria.
p0310 A73-35327
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes.
p0330 A73-36934
Corti organ lesion effects on signal perception in patients with noise induced hearing loss, correlating speech discrimination with age and sound level
p0352 A73-38182
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure.
p0425 A73-43500
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098
Airborne noise in aerospace operations and bioacoustics effects on man
p0148 N73-17100
Noise effects on human hearing process and central nervous system functions
[NASA-TT-F-748] p0365 N73-27935
Lesion threshold in guinea pig auditory sensation areas due to sonic booms
[ISL-33/72] p0369 N73-27966
NOISE INTENSITY
The second noise and social survey around Heathrow, London airport.
p0041 A73-12980
Target-detection performance as a function of noise intensity and task difficulty.
p0201 A73-26320
Book - Human factor aspects of aircraft noise.
p0206 A73-27450
Human response to transportation noise and vibration.
p0310 A73-35328
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
Cognitions and 'placebos' in behavioral research on ambient noise.
p0406 A73-42950
Human tolerance and adaptation in long term exposure to sonar signals at elevated intensities
[AD-746103] p0611 N73-11089
Airborne noise in aerospace operations and bioacoustics effects on man
p0148 N73-17100
Standardized performance battery for assessing effects of environmental stressors particularly noise on human performance
[NASA-CR-2149] p0148 N73-17102
Unique field-laboratory methodology for assessing human response to noise
[NASA-CR-2221] p0176 N73-18124
High intensity noise effects on urinary K-Na ratios in rats
p0371 N73-29018
NOISE MEASUREMENT
U ACOUSTIC MEASUREMENTS
NOISE POLLUTION
A model of psychological annoyance of noise.
p0311 A73-35627
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
Methods for quantifying the effect of noise on people.
p0392 A73-41707
Human noise sensitivity, discussing personality effects, Maplin airport planning and population separation into sensitive and imperturbable groups
p0430 A73-44770
NOISE REDUCTION
Research in aircraft noise and sonic booms reduction, remote sensing of water pollution, and earth surface changes
[DLR-MITT-72-15] p0232 N73-21153
Recording human electroencephalogram under influence of muscle noise
p0443 N73-33025
NOISE SPECTRA
Signal and noise in the human oculomotor system.
p0407 A73-42964
NOISE SUPPRESSORS
U NOISE REDUCTION
NOISE THRESHOLD
Speech and tone audiometry for testing auditory acuity of flying personnel
p0253 N73-21990
NOISE TOLERANCE
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
The second noise and social survey around Heathrow, London airport.
p0041 A73-12980
Effects of intermittent and continuous noise on serial search performance.
p0044 A73-13560
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
Effects of noise and response complexity upon vigilance performance.
p0086 A73-17523
Effects of aircraft noise on human sleep.
p0096 A73-18546
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Intellectual performance during prolonged exposure to noise and mild hypoxia.
p0325 A73-36783
Action of stable and pulsed noise on the processes of skeletal muscle excitation
p0402 A73-42662
Human noise sensitivity, discussing personality effects, Maplin airport planning and population separation into sensitive and imperturbable groups
p0430 A73-44770
Human tolerance and adaptation in long term exposure to sonar signals at elevated intensities
[AD-746103] p0611 N73-11089
Effects of space flight noise intensities on human physiological functions
p0180 N73-19080
NOMENCLATURES
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
NONEQUILIBRIUM CONDITIONS
A non-equilibrium thermodynamical analysis of the origin of life.
p0090 A73-17931
NONLINEARITY
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342

NONNEWTONIAN FLOW
A non-Newtonian model for fluid flow in the semicircular canals. p0315 A73-36431
NOREPINEPHRINE
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior. p0587 A73-12417
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters p0156 A73-22649
Circadian rhythms in catecholamines in organs of the golden hamster. p0200 A73-26120
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure. p0404 A73-42690
NORMAL DENSITY FUNCTIONS
Algorithm for spectrum decomposition during continuous man-computer interaction, noting Gaussian distribution of spectral bands and linear approximation for background p0159 A73-22971
NORMAL DISTRIBUTIONS
U NORMAL DENSITY FUNCTIONS
NORMAL FORCE DISTRIBUTION
U FORCE DISTRIBUTION
NORMALIZING
Reference image /brightness distribution functions/ existence and normalization under additive and multiplicative groups of transformations in visual field p0432 A73-44908
NORTH AMERICAN MILITARY AIRCRAFT
U MILITARY AIRCRAFT
NORTHERN HEMISPHERE
NT ARCTIC REGIONS
NORTHROP MILITARY AIRCRAFT
U MILITARY AIRCRAFT
NOSE (ANATOMY)
Aspects of air flow to the olfactory region of the human nose p0276 A73-31163
NOTATION
U CODING
NOXIOUS MATERIALS
U CONTAMINANTS
NUCLEAR EMULSIONS
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17. p0313 A73-35946
Nuclear track dosimetry for monitoring cosmic ray exposure of Apollo 16 astronauts p0292 N73-24114
NUCLEAR EXPLOSIONS
Method for calculating aircrew radiation dosage near atmospheric nuclear weapon detonation [AD-745084] p0593 N73-10079
Methods for predicting initial radiation exposure at ground surface resulting from nuclear explosions [AD-745906] p0610 N73-11084
NUCLEAR FUELS
Pu-238 grade fuels for supplying power to artificial heart and circulatory assist devices [LA-DC-72-473] p0067 N73-12115
NUCLEAR MAGNETIC RESONANCE
NT PROTON MAGNETIC RESONANCE
Recent measurements of flow using nuclear magnetic resonance techniques. p0171 A73-24855
NUCLEAR PARTICLES
NT PHOTOELECTRONS
NT PHOTONS
NT PIONS
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences. p0398 A73-42179
NUCLEAR PHYSICS
NT QUANTUM THEORY
NUCLEAR RADIATION
NT FAST NEUTRONS
NT GAMMA RAYS
NUCLEAR REACTIONS
NT HIGH ENERGY INTERACTIONS
NUCLEAR REACTORS
Atmospheric models for evaluating nuclear facility sites [BNWL-1651-VOL-2-PT-1] p0446 N73-33044
NUCLEAR SHIELDING
U RADIATION SHIELDING
NUCLEAR SUBMARINES
U SUBMARINES
NUCLEASE
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones p0428 A73-44430
Proton magnetic resonance spectra and calorimetry of interactions between ions, inhibitors, and substrates with two ribonucleases [BMVG-FBWT-72-7] p0137 N73-16071
Enthalpy values for reaction of retarding mononucleotides with ribonuclease and thermodynamic parameters for enzyme inhibitor interactions [BMVG-FBWT-72-12] p0137 N73-16073
Proton magnetic resonance spectra of ribonuclease A inhibitor complexes, noting effect on catalytic activity [BMVG-FBWT-72-13] p0137 N73-16074
NUCLEATION
Conjugation of proteinoid microspheres - A model of primordial recombination. p0091 A73-17952
NUCLEI (NUCLEAR PHYSICS)
NT HEAVY NUCLEI
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation. p0314 A73-36125
NUCLEIC ACIDS
NT RIBONUCLEIC ACIDS
Concepts related to the origin of the genetic apparatus. p0055 A73-14317
Proteins and nucleic acids in prebiotic evolution. p0090 A73-17937
Long term hypokinesia effect on protein and nucleic acid content in rat tissue p0262 N73-23027
Ultracentrifugation of biological materials [NASA-CR-114673] p0438 N73-32009
NUCLEOGENESIS
Russian book - Information macromolecules during radiation injury to cells. p0060 A73-15707
Ribosomal RNA base composition and molecular evolution in plants and animals of various taxonomic groups p0116 A73-19220
NUCLEOSIDES
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose p0396 A73-42166
NUCLEOTIDES
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT PYRIDINE NUCLEOTIDES
Genetic code evolution in terms of abiotic polynucleotide synthesis, suggesting alternating sequences of purines and pyrimidines as polypeptide codes p0162 A73-23469
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels p0383 A73-40372
NUCLIDES
NT CALCIUM ISOTOPES
NT COBALT 60
NT PLUTONIUM 238
NT POTASSIUM ISOTOPES
NT RADIOACTIVE ISOTOPES
NT SODIUM 24

NULL HYPOTHESIS
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
NUMERICAL ANALYSIS
NT ERROR ANALYSIS
NT INTERPOLATION
NT MONTE CARLO METHOD
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
Numerical solution of viscous fluid flow in finite tube with deformable walls in presence of valves for application to blood circulation process
p0298 N73-25117
NUMERICAL CONTROL
Computer-controlled differential review-time payoff as a training aid.
p0083 A73-16725
Computer controlled automatic TV-microscope system for tracking and measuring nerve cell processes in designated axons and dendrites
p0359 A73-39763
Adaptive measurement of vigilance decrement.
p0423 A73-43211
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
Automation of computer controlled robot manipulators [JPRS-59717]
p0375 N73-29051
NUTRIENTS
Reactivity and certain metabolic indices during prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Spectral characteristics of normal and nutrient-deficient maize leaves [NASA-CR-132145]
p0293 N73-24119
NUTRITION
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
NUTRITIONAL REQUIREMENTS
Nutrition systems for pressure suits.
p0355 A73-39105
Time periods for nutrient solution exchange in optimal biomass yield on porous aggregate
p0183 N73-19106
NYSTAGMUS
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus
p0123 A73-20982
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases. [AD-758545]
p0196 A73-25339
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer
p0237 A73-28502
Nystagmic response persistence to Fitzgerald-Hallpike caloric tests as function of directional cupular deflections due to head movement
p0238 A73-28510
Experimental-mathematical analysis of the effects of rotational accelerations on the vestibular apparatus
p0303 A73-34120
Pontine reticular formation as origin of neural mechanism generating saccades and nystagmus quick phases in horizontal plane, investigating effects of various brain lesions
p0316 A73-36436
The neuronal mechanism of nystagmus.
p0316 A73-36437
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
Optokinetic stimulation of an immobilized eye in the monkey.
p0318 A73-36457
Ambivalent optokinetic stimulation and motion detection.
p0318 A73-36458
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459
The significance of pendulum nystagmography in aviation medicine
p0330 A73-36941
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Development of mathematical model for slow phase rotational nystagmus induced by head movements [AMRU-R-71-3]
p0607 N73-11065
Effects of human alertness on vestibular nystagmus habituation [AD-749352]
p0103 N73-14108
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147
Guinea pigs used to determine effect of intramuscular injections of drugs on fall-out and Bekhterev nystagmus occurring after unilateral and bilateral labyrinthectomies
p0134 N73-16049
Sound, light, and proprioceptive stimuli for inhibiting vestibular illusion in man
p0181 N73-19087
Effects of gastrointestinal pressure on rabbit eye nystagmus during barotrauma
p0253 N73-21983
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes [FAA-AM-72-34]
p0416 N73-30989

O

OBESITY
Special physical training of pilots as a prophylactic measure against obesity
p0277 A73-31172
OBSERVATION
NT VISUAL OBSERVATION
OBSERVATORIES
NT SOLAR OBSERVATORIES
OBSTRUCTING
U BLOCKING
OCCLUSION
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
Comparison of plethysmographic and electromagnetic flow measurements.
p0427 A73-44215
OCEANOGRAPHY
Literature compilation on marine geology and geophysics for Caribbean Sea and adjacent regions
p0261 N73-23023
OCTAHEDRITE
U MINERALS
OCULAR CIRCULATION
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788
OCULOGRAVIC ILLUSIONS
Moving visual scenes influence the apparent

direction of gravity.
p0058 A73-15250
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511
Visual-vestibular interaction and motion perception.
p0318 A73-36460
Oculogravic illusion factor in theoretical model of pilot control loss in jet aircraft
p0110 N73-15142
Compensatory oculogravic response of eye movement direction during slow head rotation
p0111 N73-15148

OCULOMETERS
A combined photoelectric method for detecting eye movements.
p0585 A73-12079
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
Two dimensional eye movement recording using a photo-electric matrix method.
p0121 A73-20259
Rapid eye movement analyzer.
p0156 A73-22697
A vecto-oculographic approach to fast sleep eye movements in man.
p0242 A73-29994
Russian book - Methods of studying eye movements.
p0283 A73-32417
Involuntary eye movements in the presence and absence of points
p0322 A73-36568
The oculometer in remote viewing systems.
p0344 A73-37320
Influence of illumination on electro-oculographic measurements of human eye potential
[AMRU-R-71-1] p0607 N73-11064
Pupillometry using advanced design oculometer
[AD-752121] p0150 N73-17116

OCULOMOTOR NERVES
Mechanical modeling of eye muscle dynamics.
p0097 A73-18816
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339
Adjustment of saccade characteristics during head movements.
p0201 A73-26222
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers
p0242 A73-29875
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark.
p0245 A73-30390
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
Supranuclear connections to oculomotor nuclei in terms of stimulus relation to eye movements
p0316 A73-36435
Pontine reticular formation as origin of neural mechanism generating saccades and nystagmus quick phases in horizontal plane, investigating effects of various brain lesions
p0316 A73-36436
The neuronal mechanism of nystagmus.
p0316 A73-36437
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
Neuronal elements of the orienting response - Microrecordings and stimulation experiments in rabbits.
p0316 A73-36444
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
Brain stem reticular formation influence on lateral geniculate body neurons during eye movements, suggesting cortical oculomotor impulse influence mediation by perigeniculate nucleus
p0317 A73-36448
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
Signal and noise in the human oculomotor system.
p0407 A73-42964
Vestibulo-ocular response of man to oscillatory rotation during sleep
[AMRU-R-70-3] p0608 N73-11066
Response characteristics of vestibulo-ocular reflex arc
[AMRU-R-71-2] p0608 N73-11067
Theoretical model of utricular otolith and associated neural connections to oculomotor system and their response to angular motion with respect to acceleration in shear
[FPRC-1315] p0608 N73-11070
Physiological factors in human oculomotor responses to space flight stress
[DR-208-VOL-1] p0109 N73-15136
Anti-compensatory oculomotor response of pilot to rotational head stimuli
p0109 N73-15138
Anti-compensatory oculomotor responses in human visual tracking and vestibulo-ocular mechanism during rotational head movement in flight
p0110 N73-15140
Physiological control system for stabilization of retinal image in humans
p0110 N73-15141
Clinical neurological and neurophysiological aspects of vestibulo-ocular reflex
p0110 N73-15145
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147
Vestibular neuron response to rotational stimuli in space flight environment
p0111 N73-15150
Semicircular canal plugging response in cats to rotary stimulation
p0111 N73-15151
Gastrointestinal proprioceptor effects on high altitude rabbit ocular reflexes
p0253 N73-21984

OLFACTORY PERCEPTION
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
Aspects of air flow to the olfactory region of the human nose
p0276 A73-31163
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277

ON-LINE PROGRAMMING
Use of an on-line computer in a study of cardiac arrhythmia.
p0059 A73-15644

ONBOARD EQUIPMENT
NT AIRCRAFT EQUIPMENT

Design of computerized airborne traffic display device with alphanumerical control for aircraft pilots
p0598 N73-10112
Medical evaluation of pilots using onboard flight recorders
p0416 N73-30986

ONTOGENESIS
U ONTOGENY

ONTOGENY
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
Patterns of reflex excitability during the ontogenesis of sleep and wakefulness.
p0052 A73-14264
Cardiac output and oxygen transport in early ontogenesis
p0084 A73-16738
Ontogenic cerebrospinal reflex activity studies, covering spinal cord morphology, reflex arches, inhibition, intracentral responses and post-tetanic potentiation
p0121 A73-20366
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251
Gravitational effects on animal ontogeny from centrifugation studies of acceleration tolerance, considering egg and embryo development, body composition, etc
p0397 A73-42174

OOCYTES
U GAMETOCYTES

OPERATIONAL PROBLEMS
Operational principles and functions of mnemonic diagrams in controlled system
p0414 N73-30083

OPERATOR PERFORMANCE
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
Operator remnant power spectral density measurement during compensatory tracking task by serial segments method, noting Fourier coefficient processing
p0578 A73-10324
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
The problem of human efficiency in automated control systems
p0079 A73-16410
Computer programs for operator performance time prediction and workspace design
p0082 A73-16721
Work requirements test program for operator proficiency in tasks analogous to aircraft piloting under difficulty variation, deriving workload capability limits
p0082 A73-16722
The employment of a spoken language computer applied to an air traffic control task.
p0083 A73-16728
Quality /probability/ evaluation of human operator ergatic processes controlling spacecraft during rendezvous and docking with orbital station
p0087 A73-17686
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks
p0117 A73-19548
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Determination of the optimal time of continuous work for operators in man-machine systems
p0157 A73-22849
Heart activity characteristics in a human operator during a control process
p0164 A73-23806
Experimental study of emotional stress in operators
p0193 A73-25038
Russian book - Engineering psychology in aviation and astronautics.
p0278 A73-31375
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task.
p0283 A73-32395
Positioning accuracy with binary selective and fixed gain manual control systems, using finger stick control for operator performance tests
p0284 A73-32583
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
Nonadjectival rating scales in human response experiments.
p0310 A73-35400
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844
Evaluation of human operator visual performance capability for teleoperator missions.
p0344 A73-37327
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
Operator response to sinusoidally varying normal and emergency cycles in dynamic control task, testing anticipatory aversion response ability and error response
p0393 A73-41885
Dynamic operative image formation and function features during extrapolation tracking of visibly moving target, noting image reaction to operator performance
p0393 A73-41886
Effect of the information panel structure on operator activity
p0394 A73-41889
Operator reaction functional readiness manifestation in evoked potential characteristics of stimulus-response situations, obtaining response amplitude distribution
p0394 A73-41891
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893
Adaptive measurement of vigilance decrement.
p0423 A73-43211
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775

Prediction equation validity for response surface methodology analysis of surveillance tracking by human operators, comparing variance and regression procedures
p0431 A73-44776
Conference on manual control systems for human operator modeling and display systems in man machine environments
[NASA-SP-281] p0597 N73-10104
Hybrid computer identification program for visual display of adaptive control state to human operator
p0598 N73-10109
Measurements of automobile driver response functions in simulated steering control task with visual field display
p0600 N73-10130
Driving speed in relation to interactions among automobile driver, roadway variables, and vehicle control
p0601 N73-10131
Double steering wheel forcing functions for estimating automobile driver manual control response
p0601 N73-10132
Phase margin measure for determining human operator control performance in multivariable closed loop system
p0601 N73-10135
Effect of concurrent audio tasks on human operator compensatory tracking performance using manual control system
p0602 N73-10139
Effects of antimotion sickness drugs, placebos, and secobarbital on postural equilibrium functions at sea level and at simulated altitudes of 12,000 feet
[AD-748192] p0103 N73-14105
Psychophysiological analysis of job performance for optimizing operator production in man machine systems
[NASA-TT-F-14888] p0232 N73-21150
Effect of low visibility on performance of vehicle operators
[AD-749248] p0260 N73-22051
Training program for improving performance of operators in locating targets in side-looking airborne radar
[AD-762342] p0371 N73-27979
Psychological conception of operator participation in ergonomic process
p0413 N73-30081
Direct and indirect environmental factors affecting functional state of operators
p0414 N73-30084
Influence of emotional states on human operator performance and efficiency
p0414 N73-30085
Effects of fatique, age, and degree of difficulty on eye-hand coordination performance
p0446 N73-33051

OPERATORS (PERSONNEL)
NT AIRCRAFT PILOTS
NT PILOTS (PERSONNEL)
NT TEST PILOTS
Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208
Measurement of operator workload in formation processing
[NASA-CR-2150] p0070 N73-13087
Human operator model performance in tracking high performance aircraft
[AD-746725] p0072 N73-13101
Human operator adaptive behavior in slowly changing dynamic system
[AD-748243] p0102 N73-14097
Vibrational effects on visual acuity of human operator seated in military tracked vehicle
[AD-750345] p0114 N73-15172
Toxicity and safety hazard of dry beryllium copper alloy machining for human operator
p0144 N73-17059
Linear rating scale for selecting tracking task parameters by subjective operator
[AD-752036] p0151 N73-17125
Effect of human operator errors on reliability and effectiveness of his work
[AD-764937] p0441 N73-32028
Method for automatically processing indices of operator gas exchange during work in trainer using computers
p0444 N73-33035

OPHTHALMODYNAMOMETRY
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162

OPHTHALMOLOGY
NT EYE EXAMINATIONS
Ophthalmological assessment of visual functional impairment due to glare, stimulus motion and aging changes
p0080 A73-16485
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia
p0275 A73-30999
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system
p0277 A73-31173
Glaucoma development in aging flight personnel.
p0329 A73-36926
Ribes Nigrum anthocyanosides in ophthalmology
p0330 A73-36935
Ocular tension in flying personnel
p0383 A73-40347
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788
Opthalmological examination of antimalarial drugs effects on performance of navigation personnel
p0228 N73-21122
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] p0339 N73-27062

OPTICAL ABSORPTION
U ELECTROMAGNETIC ABSORPTION
U LIGHT TRANSMISSION

OPTICAL DATA PROCESSING
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801
Ancillary information effects on photointerpretation performance under four imagery system operation modes, noting identification accuracy independence on information variables
p0093 A73-18245
Automatic microscopy for mitotic cell location.
p0206 A73-27144

OPTICAL DENSITY
Human cone optical density estimation implications of conflicting results for luminosity at bleaching intensities in dichromats related to use of psychophysical data
p0246 A73-30402
Optical density properties of ocular glass laser protective filters
[AD-755406] p0261 N73-22057

OPTICAL EMISSION
U LIGHT EMISSION

OPTICAL EQUIPMENT
NT IMAGE TUBES
NT OPTICAL MEASURING INSTRUMENTS
NT SPECTROPHOTOMETERS
NT STROBOSCOPES
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Choice of optimal light characteristics for marks in optical sighting devices
p0306 A73-34241
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987

OPTICAL FILTERS
Dichromatic convergence points obtained by subtractive colour matching.
p0346 A73-37420
Optical density properties of ocular glass laser protective filters
[AD-755406] p0261 N73-22057

OPTICAL GENERATORS
U LASERS
OPTICAL ILLUSION
Influence of border and background on perception of straightness.
p0585 A73-12081
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
Sensory, learned, and cognitive mechanisms of size perception.
p0091 A73-18031
Attention field and perception probability distribution mechanisms of Muller-Lyer illusion due to angle contour
p0120 A73-20255
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094
Monocular fixation tests and prediction model for time course of aftereffect of eye turn on autokinetic illusion direction
p0235 A73-28098
Space-time adaptation of visual position constancy.
p0304 A73-34223
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180
Spatial frequency selectivity of a visual tilt illusion.
p0392 A73-41642
OPTICAL MASER MODULATION
U LIGHT MODULATION
OPTICAL MASERS
U LASERS
OPTICAL MEASUREMENT
NT COLORIMETRY
NT OPTOMETRY
NT PHOTOMETRY
Interaction of vision with optical aids.
p0390 A73-41608
Horizontal standard visibility determined by natural object contrast measurements, noting visual field observation
[DLR-FB-71-22] p0067 N73-12118
OPTICAL MEASURING INSTRUMENTS
NT OCULOMETERS
NT SPECTROPHOTOMETERS
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
OPTICAL MODULATION
U LIGHT MODULATION
OPTICAL PATHS
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145
OPTICAL PROPERTIES
NT ABSORPTANCE
NT BRIGHTNESS
NT COLOR
NT LUMINOSITY
NT RADIANCE
NT REFLECTANCE
NT TURBIDITY
Dioptric apparatus of arthropod compound eyes, describing optical characteristics of apposition eye
p0161 A73-23310
Optical properties of vertebrate eyes.
p0161 A73-23312
Effect of various parameters on long range underwater vision for narrow and broad beam illumination
p0450 N73-33630
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance
p0450 N73-33631
OPTICAL SENSORS
U OPTICAL MEASURING INSTRUMENTS
OPTICAL SPECTRUM
U LIGHT (VISIBLE RADIATION)
OPTICAL TRACKING
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
Autokinetic movement as a function of the implied movement of target shape.
p0117 A73-19549
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
Interference of 'attend to and learn' tasks with tracking.
p0353 A73-38377
Sleep deprivation effects on accuracy and speed of response selection and execution.
p0385 A73-40853
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
Dynamic operative image formation and function features during extrapolation tracking of visibly moving target, noting image reaction to operator performance
p0393 A73-41886
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959
Upper eye lid position effects in electro-oculographic vertical eye movement recordings
p0110 N73-15143
Predictive control of human eye tracking movements in response to visual stimuli
p0111 N73-15149
OPTIMAL CONTROL
A method for aiding human operator performance in a noncompensatory tracking task.
p0578 A73-10323
Performance comparisons for joystick and track ball optimized control configurations operating in rate and position modes
p0081 A73-16706
Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
Optimal control model for predicting manual VTOL pilot performance in longitudinal hovering tasks
p0601 N73-10134
Minimum quadratic cost optimal control technology for design of F-4C aircraft manual control system
p0601 N73-10137

OPTIMIZATION
NT OPTIMAL CONTROL
Determination of the optimal time of continuous work for operators in man-machine systems p0157 A73-22849
Optimal lighting for visual tasks, discussing color, type, transillumination, crossed polarization, brightness patterns, diffuse reflection and surface shadowgraphing p0247 A73-30498
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli p0401 A73-42654
Use of a response surface to optimize digital telecommunication systems. p0423 A73-43214
Optimal work-rest schedules under prolonged vibration. p0423 A73-43217
Respiratory work minimization during exercise, using respiratory frequency, functional residual capacity and air flow pattern effects as controlled variables p0433 A73-45066
Optimal control model for predicting display requirements in pilot landing performance p0599 N73-10121
Optimization of work-rest cycles to ensure acceptably high human performance in man machine systems
[AD-750176] p0103 N73-14107
Physiological motor function measurements for determining optimal bed rest periods
[NASA-TT-F-15144] p0438 N73-32004
OPTIMUM CONTROL
U OPTIMAL CONTROL
OPTOMETRY
Two dimensional eye movement recording using a photo-electric matrix method. p0121 A73-20259
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light p0425 A73-43791
ORBITAL RENDEZVOUS
Quality /probability/ evaluation of human operator ergatic processes controlling spacecraft during rendezvous and docking with orbital station p0087 A73-17686
ORBITAL SPACE STATIONS
NT SALYUT SPACE STATION
Reliability probability analysis on ergatic process in spacecraft control during approach and docking with orbital station p0064 N73-12087
Cost analysis of oxygen supply equipment and recovery systems for orbital space stations
[NASA-CR-124175] p0230 N73-21137
Habitability study of earth orbital space stations
[NASA-CR-124276] p0300 N73-25132
ORBITS
NT EARTH ORBITS
NT SATELLITE ORBITS
ORGAN WEIGHT
Organ and body mass changes in restrained and fasted domestic fowl. p0057 A73-14975
Structural conditions in the hypertrophied and failing heart. p0403 A73-42685
Regression of altitude-produced cardiac hypertrophy. p0433 A73-45065
ORGANIC CHEMISTRY
Search for biogenic structures and viable organisms in lunar samples - A review. p0094 A73-18416
Organic geochemical analysis of lunar samples with emphasis on detecting biologically significant organogenic elements, projecting techniques to Mars soil analysis p0396 A73-42163
ORGANIC COMPOUNDS
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT AMINO ACIDS
NT CARBON TETRAFLUORIDE
NT CHOLINE
NT FATTY ACIDS
NT FLUOROCARBONS
NT FLUOROHYDROCARBONS
NT GLUTAMIC ACID
NT LEUCINE
NT LYSINE
NT METHIONINE
NT NUCLEASE
NT NUCLEOTIDES
NT ORGANIC LIQUIDS
NT OXIDASE
NT PENTANONE
NT PEPTIDES
NT PYRIDINE NUCLEOTIDES
NT SEROTONIN
NT THYROXINE
NT TRYPTOPHAN
The origin of life problem - A brief critique. p0089 A73-17927
Low molecular weight compounds of organogenic elements on Apollo 11 and 12 fines and breccias obtained by vacuum pyrolysis, acid hydrolysis and crushing p0095 A73-18418
Indigenous lunar organic compound search, considering prebiological chemistry and composition possibility in deeper region under surface p0095 A73-18428
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043
Light effects on organic matter balance of oak underwood growing in forest understory p0378 N73-29330
Influence of light conditions and understory tree death on organic matter loss balance in oak underwood p0378 N73-29331
ORGANIC LIQUIDS
New formaldehyde base disinfectants. p0424 A73-43276
ORGANIC MATERIALS
Quantitative evaluation of superficial organic contaminants, soluble in halogenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis p0096 A73-18547
ORGANIC PHOSPHORUS COMPOUNDS
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs. p0200 A73-26122
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning p0250 A73-30848
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460
Cholinesterase reactivator as antidote in human organophosphate poisoning p0254 N73-21998
Temporary blindness of monkeys caused by combined effects of phosdrin and atropine exposure
[FAA-AM-73-4] p0338 N73-27055
Effects of phosdrin on electrical brain potentials in squirrel monkeys
[FAA-AM-73-3] p0338 N73-27056
ORGANISMS
Multidimensional judgments in design of ideal organisms with integral number of resource units allocated among characteristics such as memory, vision, resourcefulness, etc p0044 A73-13559
Body temperature effect on protein conformation stability in healthy and diseased organisms, noting blood plasma albumin fractions p0057 A73-14822
Ergatic organism defined as multipurpose nonautonomous control system with homeostasis with respect to functional operations conservation p0119 A73-20048
Gravity, weightlessness and organismic genetic structures. p0313 A73-35923
Elimination of toxic cysteamine in organisms and method for prolonging its radioprotective effect

p0213 N73-20069
ORGANOMETALLIC COMPOUNDS
NT CARBOXYHEMOGLOBIN
NT CHLOROPHYLLS
NT HEMOGLOBIN
NT OXYHEMOGLOBIN
NT PORPHINES
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
ORGANS
NT ESOPHAGUS
NT KIDNEYS
NT LIVER
NT LUNGS
NT PITUITARY GLAND
NT SPLEEN
NT STOMACH
NT TESTES
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
A new phenomenon of an active intraorgan pumping function of skeletal muscles
p0206 A73-27446
RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system
p0249 A73-30842
Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues
p0314 A73-35983
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428
Relationship between organ weight and blood flow in rats adapted to simulated high altitude.
p0387 A73-41156
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729
Proton dosimeter design for distributed body organs.
p0424 A73-43389
Functional morphology of various organs and tissues subjected to space flight [NASA-TT-F-738]
p0185 N73-19126
Pathomorphological changes in internal organs of white rats following 120 MeV proton irradiation and effect of partial shielding on attenuation of damage
p0214 N73-20076
Characteristics of pathomorphological changes in rat internal organs subjected to gamma-neutron irradiation with head and stomach shielded
p0214 N73-20077
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
Defined shock wave effects on miniature swine, describing organ injuries
p0369 N73-27965
ORIENTATION
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Biological clocks in animal orientation and in other functions.
p0089 A73-17825
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man.
p0092 A73-18033
ORTHOGONALITY
Orthogonal versus planar vector-electrocardiography.
p0118 A73-19930
ORTHOSTATIC TOLERANCE
Airline flight and ground personnel fatigue and orthostatic hypotension syndrome manifested by variations in retinal arterial pressure and brain circulation
p0586 A73-12156
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability
p0124 A73-20988
Proteinuria and civil aviation aircrew
p0128 A73-21538
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Human statokinetic stability as component of nonspecific resistance, discussing revolving, altitude, hypoxic and orthostatic stress dependence tests
p0327 A73-36904
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162
Effect of atmosphere with increased oxygen and carbon dioxide content on human orthostatic tolerance following 10 days of bedrest
p0135 N73-16055
Role of extracardial innervation in compensation of orthostatic load
p0443 N73-33023
OSCILLATIONS
NT SELF OSCILLATION
NT TRANSVERSE OSCILLATION
Oscillatory waves in intraretinally recorded electroretinograms in primates, considering electrode depth, stimulus duration and intensity and background illumination, anesthesia and tetrodotoxin effects
p0245 A73-30393
OSCILLATORS
Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise
p0053 A73-14293
OSCILLOGRAMS
U OSCILLOGRAPHS
OSCILLOGRAPHS
Modification of a ballisto-oscillograph for extremities
p0157 A73-22865
OSMOMETERS
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
OSMOSIS
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993
Symposium on Capillary Exchange and the Interstitial Space, Bad Duerkheim, West Germany, May 3-6, 1972, Proceedings.
p0056 A73-14649
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199
Evaluation of 165 deg F reverse osmosis modules for washwater purification. [ASME PAPER 73-ENAS-2]
p0349 A73-37964
Reverse osmosis for wash water recovery in space vehicles. [ASME PAPER 73-ENAS-12]
p0349 A73-37971
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/. [ASME PAPER 73-ENAS-16]
p0350 A73-37973
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.

[ASME PAPER 73-ENAS-19] p0350 A73-37975
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
Blood plasma hyperosmolality and antidiuretic hormone inhibition in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079
Atherosclerosis and hypertonia under high mountain conditions and seasonal effects
[NASA-TT-F-745] p0176 N73-18121
Effects of hydrostatic water bath pressure on capillary blood pressure and connective tissue dehydration
[NASA-TT-F-14894] p0265 N73-23052

OSMOTIC PRESSURE
U OSMOSIS

OTOLITH ORGANS
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511
Asymmetry of otolith responses in fish
p0279 A73-31507
Analysis of vestibular effects in experiments on swings
p0305 A73-34235
Vestibular and spinal control of eye movements.
p0316 A73-36440
Mechanical response of otolith-dependent units of cats to sinusoidal linear acceleration
[AMRU-R-69-3] p0608 N73-11068
Theoretical model of utricular otolith and associated neural connections to oculomotor system and their response to angular motion with respect to acceleration in shear
[PPRC-1315] p0608 N73-11070
Vestibular neuron response to rotational stimuli in space flight environment
p0111 N73-15150
Asymmetry of fish otolithic receptor functions and vestibular disturbances during space flight
p0262 N73-23031

OUTER PLANET SPACECRAFT
U OUTER PLANETS EXPLORERS

OUTER PLANETS EXPLORERS
Satellite quarantine constraints in outer planet mission planning
[NASA-CR-135791] p0445 N73-33041

OUTGASSING
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987
Toxicity of gaseous urine and feces emissions on rat organism
p0182 N73-19097
Phenol preservative for reducing toxic urine outgassing into air environment
p0183 N73-19098
Toxic effects of metabolic waste gases on rat organisms
p0183 N73-19101

OUTPUT
NT LASER OUTPUTS

OVERCAST
U CLOUD COVER

OVERESTIMATION
U ERRORS

OVEREXPOSURE
U RADIATION DOSAGE

OVERPRESSURE
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Effect of simulated sonic booms and overpressure on EEG waveform patterns and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066

OXIDASE
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor P from reticulocytes in the respiratory chain
p0588 A73-12510

OXIDATION
Oxidation effects on rate of C 14-labeled leucine incorporation into rat skeletal muscle protein
p0077 A73-16152
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H202.
p0090 A73-17944
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873
Organic and species-related differences in the action of certain hydrazine derivatives and of aminoperhydroacridine on the oxidative deamination of serotonin
p0163 A73-23679
Radiation oxidation of water impurities in moisture-containing products of human vital functions
p0134 N73-16051
Oxidation of atmospheric impurities in space cabin and purity of reclamated water
p0183 N73-19104

OXIDES
NT BERYLLIUM OXIDES
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT HYDROGEN PEROXIDE
NT MANGANESE OXIDES
NT NITROGEN OXIDES
NT PEROXIDES
NT POTASSIUM OXIDES
NT SULFUR OXIDES

OXIDIZERS
NT LIQUID OXYGEN
NT ROCKET OXIDIZERS

OXIMETRY
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145

OXYGEN
NT HIGH PRESSURE OXYGEN
NT LIQUID OXYGEN
NT OZONE
Heat regulation and adaptation of rats exposed to helium oxygen atmosphere
p0065 N73-12096
Oxygen, carbon dioxide, nitrogen, and noble gases for environment suitable for humans
p0104 N73-15093
Visual evoked responses from divers subjected to hyperbaric conditions simulating depths to 1200 feet breathing various gas mixtures
[AD-749325] p0108 N73-15127
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134
Change in content of gases in blood when man is exposed to high ambient temperatures
p0217 N73-20105
Effectiveness of phased dilution compared to current demand diluter oxygen delivery system
p0266 N73-23065
Biological evaluation of influence of helium-oxygen atmosphere on culture of mammalian cells
p0443 N73-33024

OXYGEN BREATHING
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504

Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet.
p0195 A73-25327
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
Aerobic capacity of relatively sedentary males.
p0353 A73-38360
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113
Behavior of enzyme activities in blood plasma after breathing hyperbaric oxygen
[DLR-FB-71-96] p0112 N73-15163
Evaluation of hazardous conditions created by facial hair on aircrew personnel wearing oxygen masks
[AD-754075] p0232 N73-21154
Oxygen breathing effects on human blood circulation and flight personnel fitness test
p0253 N73-21993
Oxygen breathing in decompression sickness and remedial recompression of human beings
[DRIC-TRANS-3095] p0334 N73-26069
Relation between hyperbaric oxygenation and functional activity of differentiated brain with respect ot glutamic acid metabolism
p0368 N73-27960
Pure oxygen and oxygen/nitrogen atmospheres for preventing decompression disease in astronauts
p0372 N73-29029

OXYGEN CONSUMPTION

Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data
p0577 A73-10171
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Evaluation of cardiac performance in exercise.
p0043 A73-13539
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698
Interdependence of oxygen uptake, heart rate and ventilation during treadmill exercise from regression slope analysis of lag logarithms
p0048 A73-14118
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163
Multichannel PDM-FM biomedical radio telemetry system for ECG, respiratory rate and oxygen consumption during exercise, considering transmitter and receiver design
p0052 A73-14278
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature
p0053 A73-14288
Energy cost of muscle work in a state of fatigue
p0080 A73-16697
Cerebral circulation alteration during hypothermia
p0081 A73-16698
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
Thermoregulatory reactions of animals in a helium-oxygen medium
p0088 A73-17695
Statistical correlations of maximum oxygen consumption, body weight and endurance /work/ performance in exercise-oxygen studies
p0096 A73-18472
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362
Oxygen consumption alteration effects on human endurance capacity as function of relative work, muscle blood flow and anaerobic metabolism
p0241 A73-29753
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
Optimal duration of endurance performance on the cycle ergometer in relation to maximal oxygen intake.
p0283 A73-32397
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Specific features in the activity of the oxygen transport system of the organism during hand-performed working cycles of submaximum intensity
p0323 A73-36579
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains
p0323 A73-36581
Adequacy of the Haldane transformation in the computation of exercise oxygen consumption in man.
p0324 A73-36658
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788
Human intrapair twin differences, examining age, height, weight, heart volume, metabolism, respiratory rate and monozygous/dizygous differences
p0361 A73-39792
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
Effect of training with eccentric muscle contractions on skeletal muscle metabolites.
p0390 A73-41523
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623

Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models. p0391 A73-41639

Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm. p0399 A73-42201

Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload. p0404 A73-42688

Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects p0429 A73-44671

Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model. p0433 A73-45060

Oxygen kinetics for constant work loads at various altitudes. p0433 A73-45062

Oxygen consumption measurements during continual centrifugation of mice. p0434 A73-45071

Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087

Correlation of assessed maximum oxygen intake with predicted performance in running events
[AD-746867] p0071 N73-13093

Work, heat, and oxygen cost of various activities of man p0106 N73-15109

Correlation of physical activity and oxygen consumption between man and mouse
[FOA-1-B-1233-A5] p0149 N73-17108

Changes in oxygen consumption in rats after inoculation with polymer combustion products p0182 N73-19096

Hashish smoking effects on human oxygen consumption during physical stress and safe driving ability p0228 N73-21115

Exercise effects on human heart rate and oxygen uptake p0371 N73-29020

Treadmill running effect on human oxygen consumption p0441 N73-33013

OXYGEN DEFICIENCY
U HYPOXIA

OXYGEN MASKS

Color photographic system using grid projector and telecentric lenses for recording contours of human face for aircrew oxygen mask fitting
[RAE-TR-71184] p0141 N73-16099

Evaluation of hazardous conditions created by facial hair on aircrew personnel wearing oxygen masks
[AD-754075] p0232 N73-21154

OXYGEN METABOLISM

Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues p0576 A73-10156

Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry p0045 A73-13750

A criterion for oxygen supply optimality in tissues and the capillary circulation rate p0047 A73-13821

Cardiac output and oxygen transport in early ontogenesis p0084 A73-16738

Biological role of atmospheric oxygen in the mechanism of blood coagulation p0087 A73-17678

Assessment of hypoxia in the human heart. p0118 A73-19928

Myocardial metabolism during exposure to carbon monoxide in the conscious dog. p0159 A73-22935

Changes in gaseous metabolism and cardiac output per minute during local muscle work in man p0164 A73-23809

Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta p0193 A73-25042

Kinetics of oxygen uptake and recovery for supramaximal work of short duration. p0198 A73-25648

Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres p0207 A73-27702

Effect of adaptation to cold on the energy characteristics of muscular activity p0235 A73-28295

Relative rates of arterial lactate and oxygen-deficit accumulation in hypoxic dogs. p0281 A73-31922

Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460

Changes in respiration effectiveness during muscular activity p0323 A73-36580

Aerobic capacity of relatively sedentary males. p0353 A73-38360

Anaerobic threshold and respiratory gas exchange during exercise. p0360 A73-39785

Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions p0426 A73-43929

Hemoglobin species diffusion effect on oxygen transport in moving and stationary flat films of hemoglobin solution p0426 A73-43993

Oxygen redox processes in blood coagulation mechanism p0063 N73-12079

Design and performance of breathing metabolic simulator p0075 N73-13850

Metabolic implications in hyperbaric oxygen systems
[AD-749381] p0103 N73-14106

Automatic device for measuring human metabolic oxygen rate and breathing dynamics
[NASA-CASE-MFS-21415-1] p0112 N73-15156

Human oxygen metabolism and pulmonary functions during hypodynamic water immersion p0181 N73-19082

Transverse acceleration effects on human respiratory rate and oxygen metabolism p0181 N73-19084

Human nitrogen and water/salt metabolisms in controlled regenerative atmosphere p0181 N73-19089

Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control p0182 N73-19093

Physiological effects of argon/oxygen breathing on rats noting carbon dioxide level p0182 N73-19094

Design and performance of metabolic gas analyzer using mass spectrometer and digital data printout
[NASA-CR-128842] p0190 N73-19160

Pressure chambers for testing effect of oxygen inspiration on fatique during flight
[JPRS-59041] p0264 N73-23051

OXYGEN PRODUCTION

Atmospheric regeneration in closed chambers by potassium superoxide p0332 A73-36951

Long term performance test on electrolytic oxygen generator for manned test chamber
[NASA-CR-128687] p0112 N73-15160

Effect of toxic substances on algae by observing photosynthesis determined by oxygen production of algae
[DRIC-TRANS-2991] p0187 N73-19139

Electrochemical system with solid electrolyte for regenerating oxygen from CO2 and H2O p0441 N73-33015

OXYGEN REGULATORS

The diluter-demand oxygen system used during the international Himalayan expedition to Mount Everest. p0194 A73-25145

OXYGEN SPECTRA

Human endocrine-metabolic responses to graded oxygen pressures. p0116 A73-19479

OXYGEN SUPPLY EQUIPMENT
NT OXYGEN MASKS
Fire hazard reduction in corporate aircraft oxygen system, covering hoses, regulators, manifolds, cylinders, leakage, combustion conditions and servicing procedures
p0357 A73-39215
Cleaning processes and postcleaning inspection procedures for meeting oxygen system cleaning requirements
[NASA-SP-3072] p0111 N73-15155
Design and performance of prototype nitrogen/oxygen supply unit using water/hydrazine electrolysis to provide cabin leakage makeup in manned spacecraft
[NASA-CR-128688] p0112 N73-15159
Long term performance test on electrolytic oxygen generator for manned test chamber
[NASA-CR-128687] p0112 N73-15160
Cost analysis of oxygen supply equipment and recovery systems for orbital space stations
[NASA-CR-124175] p0230 N73-21137
Breathing apparatus for parachutists
[AD-756554] p0296 N73-24141
Electrochemical process for recovery of oxygen from atmospheres of manned space capsules
[NASA-CR-114573] p0300 N73-25130
Cost analysis of oxygen recovery subsystems for life support systems
[NASA-CR-124304] p0340 N73-27075
Cryogenic insulation of liquid oxygen dewars for aircraft pilot breathing masks
[AD-763325] p0421 N73-31026
OXYGEN SYSTEMS
U OXYGEN SUPPLY EQUIPMENT
OXYGEN TENSION
NT HYPOXEMIA
Microvascular responses to alterations in oxygen tension.
p0581 A73-11010
Studies of blood gas analysis at abnormal environment.
p0582 A73-11210
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
pC056 A73-14647
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.
p0094 A73-18335
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis.
pC094 A73-18336
Russian book - Tissue, oxygen in the presence of extremal flight factors.
p0116 A73-19425
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
Gas dynamic theory of gas exchange in organisms based on oxygen and carbon dioxide permanent partial pressure gradients in tissues, blood and lungs
p0169 A73-24523
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
Changes in microvascular diameter and oxygen tension induced by carbon dioxide.
p0200 A73-26116
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711
Characteristics of spontaneous oxygen tension variations in human brain structures
p0249 A73-30844
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689
Response of coronary blood flow to pH-induced changes in hemoglobin-O2 affinity.
p0433 A73-45061
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
Obtaining stable oxygen electrodes by coating with plasma catalyzed polymer film
[AD-748422] p0074 N73-13120
Effects of atmospheric oxygen concentration on Chlorella photosynthesis
p0262 N73-23032
Cone model for oxygen diffusion in brain considering spatial tissue/capillary permeability
[RAE-LIB-TRANS-1663] p0333 N73-26060
OXYGEN TOXICITY
U HYPEROXIA
OXYGENATION
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
Oxygen transport augmentation mechanism for human hemoglobin, considering hemoglobin translational mobility absence effects
p0362 A73-39795
Cone model for oxygen diffusion in brain considering spatial tissue/capillary permeability
[RAE-LIB-TRANS-1663] p0333 N73-26060
OXYHEMOGLOBIN
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
Significance of the Bohr and Haldane effects in the pulmonary capillary.
p0129 A73-21614
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin.
p0241 A73-29850
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations.
p0310 A73-35460
Oxygen transport augmentation mechanism for human hemoglobin, considering hemoglobin translational mobility absence effects
p0362 A73-39795
Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions
p0426 A73-43929
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
OZONE
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001

P

P-531 HELICOPTER
Measurement and effects of triaxial vibration on

pilots in P-531 (Scout) helicopter under different flight conditions
[ISVR-TR-58] p0141 N73-16100
PACIFIC ISLANDS
NT JAPAN
PACKAGING
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Feasibility determination for polyethylene packaging of drugs stocked in spacecraft pharmacies
p0218 N73-20114
PAIN SENSITIVITY
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003
PAINTS
X ray fluorescence analysis for determining lead content of paint on pencils in Goddard supply system
p0148 N73-17097
PANCREAS
Mechanisms of certain functional shifts during change in the blood of the content level of external pancreatic-gland secretion components
p0081 A73-16700
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789
PAPILLAE
Visual work duration and intensity effects on optic papillae expansions and shape alterations, noting differences between trained and untrained subjects
p0080 A73-16694
PARABOLIC FLIGHT
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511
Problems in simulating weightlessness
p0224 N73-21090
Blind fish responses to gravitational changes as in parabolic flight
p0226 N73-21101
PARACHUTE DESCENT
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749
Visual-motor coordination characteristics of parachute jumpers
p0088 A73-17750
Sea survival after ejection and parachute descent, describing hand operated canopy connector release to free pilot from entanglement or dragging
p0284 A73-32665
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
Breathing apparatus for parachutists
[AD-756554] p0296 N73-24141
PARACHUTING
U PARACHUTE DESCENT
PARALLEL FLOW
NT PIPE FLOW
NT STEADY FLOW
PARALYSIS
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
PARANASAL SINUSES
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses
p0409 A73-43132
PARAPSYCHOLOGY
U EXTRASENSORY PERCEPTION
PARASITIC DISEASES
NT BLIGHT
PARKINSON DISEASE
Characteristics of spontaneous oxygen tension variations in human brain structures
p0249 A73-30844
PARTIAL PRESSURE
NT HYPOXEMIA
NT OXYGEN TENSION
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature
p0053 A73-14288
PARTICLE ACCELERATION
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
PARTICLE ACCELERATORS
NT VAN DE GRAAFF ACCELERATORS
PARTICLE BEAMS
NT ION BEAMS
PARTICLE COUNTERS
U RADIATION COUNTERS
PARTICLE DENSITY (CONCENTRATION)
NT ION DENSITY (CONCENTRATION)
NT PROTON DENSITY (CONCENTRATION)
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate
p0237 A73-28476
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521
PARTICLE DETECTORS
U RADIATION COUNTERS
PARTICLE INTERACTIONS
NT MOLECULAR INTERACTIONS
PARTICLE SIZE DISTRIBUTION
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521
PARTICLE TRACKS
U PARTICLE TRAJECTORIES
PARTICLE TRAJECTORIES
Delta ray particle track structure theory for radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields
p0196 A73-25423
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
PARTICLES
NT AEROSOLS
NT CATIONS
NT CHARGED PARTICLES
NT CORPUSCULAR RADIATION
NT FAST NEUTRONS
NT FERRIC IONS
NT FINES
NT LIGHT BEAMS
NT METAL IONS
NT NUCLEAR PARTICLES
NT PHOTOELECTRONS
NT PHOTONS
NT PIONS
NT PRIMARY COSMIC RAYS
NT SOLAR WIND
PARTICULATE FILTERS
U FLUID FILTERS
PARTICULATE SAMPLING
Microbiological assay procedures for spacecraft cabling, antennas, solar panels, and thermal blankets
[NASA-CR-130383] p0149 N73-17109

PASSENGER AIRCRAFT
NT BOEING 720 AIRCRAFT
Commercial aircraft passenger cabins interior design, considering seating arrangements, cabin architecture and fittings, materials and color schemes and maintainability
p0163 A73-23687
Development of mathematical model to analyze traveler acceptance factors in short haul air carrier operations
p0591 N73-10023
Computerized simulation of passenger emergency evacuation efficiency using Boeing 720 aircraft models
[FAA-AM-72-30] p0150 N73-17119
Dynamic tests of seat belt system, seat belt/shoulder harness system, and seat belt airbag system for aircraft
[FAA-NA-73-30] p0375 N73-29052
PASSENGERS
Medical considerations for aircraft passengers.
p0047 A73-13802
Analysis of passenger acceptance of commercial low-density short haul, air transportation
[NASA-CR-132285] p0367 N73-27950
PATCHING
U MAINTENANCE
PATHOGENESIS
Pathogenesis of some respiration and circulation reactions to barometric pressure gradients
p0123 A73-20980
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529
PATHOLOGICAL EFFECTS
Russian monograph on radioactive isotopes effects on organisms covering metabolism, elimination, acceleration methods, pathogenesis and treatment of damage, toxicity, biological action, etc
p0590 A73-12865
Pathomorphological and histochemical analysis of Luna 16 fine lunar soil fraction biological effect on mice
p0056 A73-14569
Clinical diagnosis of angina pectoris, implicating obstructive disease of coronary arteries and effects of paroxysmal events on heart rate and blood pressure
p0085 A73-17277
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range
p0088 A73-17748
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701
RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system
p0249 A73-30842
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues
p0314 A73-35983
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481
Russian book on structural and functional plasticity of interneuron synapses during readjustment to chemical and physical damage covering degenerative and regenerative changes
p0389 A73-41280
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
Metabolic implications in hyperbaric oxygen systems
[AD-749381] p0103 N73-14106
Hyperoxic damage in animal cells, tissues, and organs
p0182 N73-19091
Hyperoxic morphological changes in connective rat tissues
p0182 N73-19092
Pathophysiological response reactions of rats to acute hypoxia after injection of cysteamine and aminothiol group radioprotector
p0211 N73-20059
PATHOLOGY
NT HUMAN PATHOLOGY
Physiological and pathological responses of humans exposed to electricity
[NASA-CR-128422] p0592 N73-10065
Pathomorphological changes in internal organs of white rats following 120 MeV proton irradiation and effect of partial shielding on attenuation of damage
p0214 N73-20076
Characteristics of pathomorphological changes in rat internal organs subjected to gamma-neutron irradiation with head and stomach shielded
p0214 N73-20077
Combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090
PATIENTS
Salvarsan therapy of luetic patients and behavior of Wassermann reaction
[NASA-TT-F-14618] p0609 N73-11076
NASA contributions to patient monitoring
[NASA-CR-131538] p0230 N73-21138
PATTERN RECOGNITION
NT CHARACTER RECOGNITION
Digital filters applicable to electroencephalographic pattern recognition.
p0582 A73-11464
A minor perturbing effect of retinal locus on dot pattern recognition - Rejection of a possible artifact.
p0588 A73-12524
Psychological test for relative contributions of specific and nonspecific components to intersensory transfer between vision and touch
p0043 A73-13525
Numerical classification and coding of electrocardiograms.
p0059 A73-15647
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
Inter-hemispheric transfer of meaningful visual information in normal human subjects.
p0119 A73-20123
Electrical stimulation effects of human eye on photic threshold for square wave vision as function of wavelength, orientation and spatial frequency
p0121 A73-20260
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
Retention of information in the iconic visual memory during recognition of images of varying complexity
p0199 A73-26084
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123
Properties of human visual orientation detectors - A new approach using patterned afterimages.
p0239 A73-29124
Automatic recognition of electrocardiographic patterns
p0308 A73-34964

Automatic cataloging of electrocardiographic patterns
p0309 A73-34965
Automatic analysis and classification of electroencephalograms
p0309 A73-34966
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242
Interaction between contours in visual masking
p0345 A73-37395
Sufficient conditions for the discrimination of motion.
p0388 A73-41181
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition
p0393 A73-41816
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions
p0393 A73-41887
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959
Noise blurred image recognition probability characteristics from experimental investigation, showing difference from statistical decision theory data
p0428 A73-44667
Computer technique for automatic analysis of planar characteristics of chromosome patterns in microscopic observations
[JPRS-57418] p0070 N73-13085
Substantive analyses of optical design, using visual perception
[AD-749372] p0100 N73-14084
Pattern recognition by devices consisting of arrays of cooperating elements
[PB-211238] p0102 N73-14096
Proceedings of conference on pattern information processing
[PB-214617/3] p0294 N73-24129
Control mechanism in accommodation-vergence eye movement system in human eyes and importance of central and peripheral vision in pattern perception by human beings
p0411 N73-30061
Importance of central and peripheral vision in pattern perception
p0411 N73-30063

PATTERN REGISTRATION
Colored aftereffects after prolonged inspection of convex lines of one color and concave lines of another color
p0389 A73-41303

PAYLOADS
Model for estimating impact of manned EVA costs on future payloads - Vol. 3
[NASA-CR-128928] p0268 N73-23083

PDM (MODULATION)
U PULSE DURATION MODULATION

PEDALS
Angular measurements of foot motion for application to the design of foot-pedals.
p0580 A73-10773

PEDOLOGY
U SOIL SCIENCE

PELVIS
Some biomechanical properties of the pelvic girdle of man
p0045 A73-13743

PENETRATING PARTICLES
U CORPUSCULAR RADIATION

PENS
X ray fluorescence analysis for determining lead content of paint on pencils in Goddard supply system
p0148 N73-17097

PENTANONE
Toxicity of long term methyl isobutyl ketone exposure in dogs, monkeys, mice, and rats
[NASA-TM-X-69100] p0177 N73-18130

PENTOBARBITAL SODIUM
Sodium pentobarbital effects on albino rats in normocapnic and chronically hypercapnic conditions
[AD-751234] p0187 N73-19142

PENTOSE
NT RIBOSE

PEPTIDES
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
A mechanism for polypeptide synthesis on a protein template.
p0090 A73-17943
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
Protein molecules peptide groups excitation interpretation by quantum theory, noting application to muscle contraction
p0159 A73-23297
Genetic code evolution in terms of abiotic polynucleotide synthesis, suggesting alternating sequences of purines and pyrimidines as polypeptide codes
p0162 A73-23469
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
Prebiotic reactions combining amino acids and ribonucleotides into polypeptides and polynucleotides in presence of urea, imidazole and Mg positive ion, suggesting contemporary biosynthesis parallels
p0383 A73-40372

PERCEPTION
NT AUDITORY PERCEPTION
NT AUTOKINESIS
NT BINAURAL HEARING
NT CONSCIOUSNESS
NT CRITICAL FLICKER FUSION
NT EXTRASENSORY PERCEPTION
NT OLFACTORY PERCEPTION
NT PAIN SENSITIVITY
NT PROPRIOCEPTION
NT SENSORY PERCEPTION
NT SOUND LOCALIZATION
NT SPACE PERCEPTION
NT TACTILE DISCRIMINATION
NT VERTICAL PERCEPTION
NT VIBRATION PERCEPTION
NT VISUAL DISCRIMINATION
NT VISUAL PERCEPTION
Reflex act structural components interaction in terms of reflection, creativity and organism-environment relations, noting subjective and objective perception and attitude formation
p0061 A73-15798

PERCEPTRONS
U SELF ORGANIZING SYSTEMS

PERCEPTUAL SPEED
U PERCEPTUAL TIME CONSTANT

PERCEPTUAL TIME CONSTANT
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097

PERFORMANCE
Effects of intraperitoneally administered hydrazine on electrophysiology, general behavior, and performance of cats
[AD-746014] p0609 N73-11081
Design and performance of breathing metabolic simulator
p0075 N73-13850
Performance of prototype high pressure space suit glove
[NASA-CR-114532] p0112 N73-15162
Design and performance of demand regulated liquid breathing systems for mammalian respiration
p0252 N73-21976

Performance of hadron laser safety eyeshields in protecting personnel from accidental ocular exposure to common laser radiation
[AD-759921] p0337 N73-26099
Dynamic tests of seat belt system, seat belt/shoulder harness system, and seat belt airbag system for aircraft
[FAA-NA-73-30] p0375 N73-29052

PERFORMANCE CHARACTERISTICS
U PERFORMANCE

PERFORMANCE DECREMENT
U PERFORMANCE

PERFORMANCE PREDICTION
NT PREDICTION ANALYSIS TECHNIQUES
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
Psychiatric and psychometric predictability of test pilot school performance.
[AD-754148] p0050 A73-14165
The prediction of team monitoring performance under conditions of varied team size and decision rules.
p0081 A73-16710
Computer programs for operator performance time prediction and workspace design
p0082 A73-16721
Critical skills and procedures isolation within replacement air group /RAG/ training for F-4 pilot performance prediction
p0082 A73-16723
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials
p0280 A73-31549
Prediction of long-term heat-pipe performance from accelerated life tests.
p0384 A73-40438
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775
Prediction equation validity for response surface methodology analysis of surveillance tracking by human operators, comparing variance and regression procedures
p0431 A73-44776
Suboptimal sampling and control behavior of human operator in output prediction task for automatic process
p0598 N73-10114
Optimal control model for predicting manual VTOL pilot performance in longitudinal hovering tasks
p0601 N73-10134
Phase margin measure for determining human operator control performance in multivariable closed loop system
p0601 N73-10135
Data management system for prediction of Naval student pilot performances
[AD-744984] p0613 N73-11104
Reliability probability analysis on ergatic process in spacecraft control during approach and docking with orbital station
p0064 N73-12087
Color vision tests as predictive indicators of flying task performance
p0180 N73-19074
Three different bases for susceptibility prediction to motion sickness
p0225 N73-21093
Motion sickness questionnaire and field independence scores as predictors of success in Naval aviation training
p0225 N73-21097
Alcohol reference method for predicting drug modifications of central nervous system activity and pilot performance decrease
p0227 N73-21112
Psychological assessment techniques for determining astronaut attentional flexibility and associate performance
[NASA-CR-128945] p0295 N73-24136
Quantitative evaluations of adaptive physical operator/manipulator control systems
p0336 N73-26090
Kalman filter estimation of aircraft pilot performance
[AD-764694] p0441 N73-32026

PERFORMANCE TESTS
Performance comparisons for joystick and track ball optimized control configurations operating in rate and position modes
p0081 A73-16706
Ancillary information effects on photointerpretation performance under four imagery system operation modes, noting identification accuracy independence on information variables
p0093 A73-18245
Central nervous system stresses effects estimation, discussing ocular positioning movements functional significance and psychological processes
p0128 A73-21542
Positioning accuracy with binary selective and fixed gain manual control systems, using finger stick control for operator performance tests
p0284 A73-32583
Protective helmets performance evaluation for design optimization, considering failure analysis from aircraft accident reports
p0284 A73-32655
Comparative study of patches for liquid cooled garments.
p0345 A73-37404
Experiments and simulations to determine effect of compliance and force feedback on manipulator performance
[NASA-CR-128605] p0603 N73-10151
Long-term testing of water electrolysis systems for regenerative life support system in manned space stations
[NASA-CR-128629] p0612 N73-11095
Performance of anti-G valve subjected to varying acceleration forces
[AD-760814] p0377 N73-29062

PERIODIC OSCILLATIONS
U OSCILLATIONS

PERIODIC VARIATIONS
NT ANNUAL VARIATIONS
NT DIURNAL VARIATIONS
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
Operator response to sinusoidally varying normal and emergency cycles in dynamic control task, testing anticipatory aversion response ability and error response
p0393 A73-41885

PERIODICITY
U PERIODIC VARIATIONS

PERIODICITY (BIOLOGY)
U RHYTHM (BIOLOGY)

PERIPHERAL CIRCULATION
Microvascular responses to alterations in oxygen tension.
p0581 A73-11010
Studies of blood gas analysis at abnormal environment.
p0582 A73-11210
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements
p0087 A73-17682
Book - Peripheral vascular diseases: Diagnosis and management.
p0089 A73-17871
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344

Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159
Comparison of plethysmographic and electromagnetic flow measurements.
p0427 A73-44215
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
Functional state of lymphoid cell in peripheral blood of astronauts and immunoreactivity of individual astronauts after space flight
[NASA-TT-F-15089] p0418 N73-30999

PERIPHERAL NERVOUS SYSTEM
Study of the peripheral auditory adaptation in a psycho-acoustic experiment
p0164 A73-23807
Functional model of the frequency channel of the peripheral auditory analysor
p0164 A73-23808
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint
p0166 A73-23943
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition
p0393 A73-41816
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664
Survey of literature and morphological studies of vestibular nerve
[NASA-CR-135746] p0445 N73-33042

PERIPHERAL VISION
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
Information processing in the visual periphery.
p0304 A73-34150
Reaction times for focal and nonfocal /peripheral/ processing of simultaneously presented color and form stimuli
p0388 A73-41182
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343
Peripheral acuity with complex stimuli at two viewing distances
p0191 N73-19965
Control mechanism in accommodation-vergence eye movement system in human eyes and importance of central and peripheral vision in pattern perception by human beings
p0411 N73-30061
Importance of central and peripheral vision in pattern perception
p0411 N73-30063

PERMEABILITY
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174

PEROXIDES
NT HYDROGEN PEROXIDE
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873

PERSONALITY
Daytime human performance and temperament rhythms as function of individual introversion-extroversion rating
p0286 A73-33157
Individual personality variability difficulties in measurement of human psychophysiological reactions to flight stress, emphasizing psychological interview and evaluation methods
p0408 A73-43130
Psychobiological factors for predicting monotony tolerance and selecting personnel for isolated duty
[AD-747272] p0071 N73-13098
Human performance in schematic concept formation as a function of socio-economic level, personality, intelligence, and race
[AD-744781] p0260 N73-22052

PERSONALITY TESTS
Psychological and personality test results and problems in selection of pilots, air traffic controllers, and technicians from Yemen
p0368 N73-27956

PERSONNEL
NT AIRCRAFT PILOTS
NT ASTRONAUTS
NT COSMONAUTS
NT CREWS
NT FLIGHT CREWS
NT FLIGHT SURGEONS
NT FLYING PERSONNEL
NT GROUND CREWS
NT INSTRUCTORS
NT MEDICAL PERSONNEL
NT NAVIGATORS
NT OPERATORS (PERSONNEL)
NT PILOTS (PERSONNEL)
NT SCIENTISTS
NT SPACECREWS
NT TEST PILOTS
Results from employment workshop program for unemployed aerospace engineers and scientists
[PB-209366] p0605 N73-10168

PERSONNEL DEVELOPMENT
Air traffic controller responsibilities and performance evaluation criteria development, discussing manager/monitor functions, field evaluation tests and training criteria
p0353 A73-38472
Comparison of the job attitudes of personnel in three air traffic control specialties.
p0355 A73-39108
Safe flying, skilled personnel and aircraft maintenance assurance via safety equipment, initial and recurrent training, protective clothing and shelter from inclement weather, maintenance scheduling, etc
p0357 A73-39212
Workshop for teaching professional unemployed personnel competitive job searching techniques
[PB-209367] p0604 N73-10159
Cybernetic application of computers in personnel training
[AD-751145] p0178 N73-18143
Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 1
[NASA-CR-135487] p0421 N73-31020
Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 2
[NASA-CR-135488] p0421 N73-31021

PERSONNEL MANAGEMENT
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel
p0303 A73-34078
Workshop for teaching professional unemployed personnel competitive job searching techniques
[PB-209367] p0604 N73-10159
Industrial model for leave and overtime taking behavior of employees exposed to peak work activity periods in relation to health, demography, and job variables

p0143 N73-17055
Automated medical history questionnaire for screening industrial personnel and scheduling physical examinations
p0144 N73-17060
Computerized multivariate scheduling of physical examinations for NASA personnel in clinical intervention program
p0145 N73-17068
Physical exercise effects on health of NASA personnel
p0145 N73-17069
Continuous monitoring of hypertension and hypercholesterolemia in NASA employees for prevention of heart disease and disability
p0145 N73-17072
Industrial health measures and environmental control to insure worker productivity
p0146 N73-17077
Conference on occupational and environmental medical services provided to NASA employees
[NASA-TM-X-69074] p0146 N73-17078
Management of NASA employee health problems by automated medical system
p0146 N73-17079
Influence of repeated test and dietary counseling on hypercholesterolemia control in NASA employees
p0146 N73-17081
Chronic disease health trends and mortality rates in employee population of NASA Goddard Space Flight Center
p0147 N73-17086
Medical services of operating environmental health program for industrial workers
p0147 N73-17093
Time-span of discretion as measure of military work and responsibility
[DRAE-M45] p0260 N73-22049
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 1
[AD-756638] p0296 N73-24143
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 2
[AD-756639] p0296 N73-24144
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 3
[AD-756640] p0296 N73-24145
Manpower requirements for aircraft maintenance operations of USAF
[AD-760082] p0337 N73-26097
Military personnel management and human factors engineering
[AD-763768] p0415 N73-30094

PERSONNEL SELECTION
NT PILOT SELECTION
Flight personnel training meetings, covering decision making, cockpit personnel selection and instructor role analysis
p0041 A73-13073
Proposed new test for aptitude screening of air traffic controller applicants.
p0155 A73-22535
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
Psychotechnical selection of flight crews in South Vietnam
p0328 A73-36918
Workshop for teaching professional unemployed personnel competitive job searching techniques
[PB-209367] p0604 N73-10159
Comparison of age, education, pre-FAA experience, aptitudes, training course performance, and post-Academy attrition rates of male and female trainees
[FAA-AM-72-22] p0611 N73-11094
Psychobiological factors for predicting monotony tolerance and selecting personnel for isolated duty
[AD-747272] p0071 N73-13098
Tasks analyses to determine technical personnel requirements for maintenance of Navy microelectronic shipboard equipment
[AD-748040] p0074 N73-13123
Multiphase health screening and medical history questionnaire for preventive/occupational physical examinations
p0143 N73-17052
Attrition-retention rates of air traffic control trainees recruited during 1960 to 1963 and 1968 to 1970
[FAA-AM-72-33] p0222 N73-20140
Predictability of motion sickness in pilot selection - conferences
[AGARD-CP-109] p0225 N73-21092
Reaction assessment of vestibular disorientation stress for aircrew selection, using visual displays and tasks
p0225 N73-21096
Motivational patterns underlying devolunteering by submarine graduate school personnel
[AD-749324] p0260 N73-22054
Computation of coriolis forces in selecting flying personnel for vestibular tolerance
p0263 N73-23042
Curriculum development and personnel training for information centers
p0297 N73-24205
Psychological and personality test results and problems in selection of pilots, air traffic controllers, and technicians from Yemen
p0368 N73-27956

PERSPIRATION
Perspiration secretion distribution over human body based on extended Kerslake cylinder model, comparing with predicted 4 hr sweat rate
p0041 A73-13122
Design and function of sweat sensor to monitor motion sickness sweat response
p0050 A73-14160
Differential thermal sensitivity in the human skin.
p0251 A73-30912
Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757
Desoxyribonucleases in sweat gland secretion of man
p0429 A73-44674

PH
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads
p0584 A73-11924
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
Carbon dioxide concentration, pH and nutrient concentration effects on blue-green algae relative abundance to green algae in lakes
p0096 A73-18577
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281
Response of coronary blood flow to pH-induced changes in hemoglobin-O2 affinity.
p0433 A73-45061

PH FACTOR
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134

PHANTOM AIRCRAFT
NT F-4 AIRCRAFT

PHARMACOLOGY
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
The role of biogenic amines in sleep.
p0051 A73-14260
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847

Influence of different motor regimes on the convulsive reactivity of the central nervous system. p0085 A73-17178
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus p0123 A73-20982
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics. p0126 A73-21464
Adaptive hormone action and nonspecific adaptive function of steroid hormones, discussing stress resistance mechanisms of steroids pharmacologically classified as syntoxic and catatoxic p0155 A73-22536
Psychopharmacology in treating psychiatric diseases, negative emotions, and nerve stimulation, discussing tranquilizers synthesis and effects p0207 A73-27497
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals p0278 A73-31391
Techniques for microinjection of biologically active substances into subcortical structures of the brain p0322 A73-36574
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation p0343 A73-37252
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972. p0405 A73-42856
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons. p0424 A73-43338
Pharmacologic investigations of antagonistic effects of pyridines on isolated guinea pig ileum [BMVG-FBWT-72-14] p0138 N73-16075
Pharmacological measures for prophylactic and restorative treatment of men and animals during space flight p0212 N73-20060
Pharmacological data for aminothiol and indolylalkylamine radioprotectors p0212 N73-20066

PHASE ANGLE
U PHASE SHIFT
PHASE DETECTORS
Frequency discriminator for on-line measurements of entrainment and synchronization in EEG signals as related to human alertness [NASA-CR-129173] p0611 N73-11091
PHASE SHIFT
Phase progression of the QRS complexes in electrocardiograms versus the inscribing directions of the QRS loops in vectorcardiograms. p0286 A73-33116
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain. p0357 A73-39481
PHASE TRANSFORMATIONS
NT PROPELLANT EVAPORATION
NT VAPORIZING
PHASE VELOCITY
Optokinetic stimulation of an immobilized eye in the monkey. p0318 A73-36457
PHENACETIN
U ACETANILIDE
PHENYLS
Liquid retention in chlorpropamide therapy and water intoxication of patients [NASA-TT-F-14597] p0609 N73-11077
Antimicrobial phenyl preparations for human urine conservation during space flight p0184 N73-19112
PHILOSOPHY
Philosophical and social psychological study of Apollo moon scientist [NASA-CR-130832] p0176 N73-18122
PHONOARTERIOGRAPHY
Transcutaneous measurement of blood velocity profiles and flow. p0408 A73-43108
PHONOCARDIOGRAMS
U PHONOCARDIOGRAPHY
PHONOCARDIOGRAPHY
NT ECHOCARDIOGRAPHY
On the causes of the changes of the second heart sound in left bundle branch block. p0581 A73-11008
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography. p0583 A73-11509
Unusual diastolic heart beat in pericardial effusion. p0041 A73-13059
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality. p0097 A73-18870
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print. p0196 A73-25475
Stethoscope- or phonocardiograph-detectable systole-associated left atrial sound in terms of activity recording, sound genesis, hemodynamic correlations and clinical applications p0199 A73-25696
Familial syndrome of midsystolic click and late systolic murmur. p0199 A73-25697
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome. p0199 A73-25698
Intracardiac heart murmurs and sounds influenced by respiration. p0283 A73-32546
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings. p0354 A73-38867
PHOSPHATES
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT DIPHOSPHATES
NT NUCLEOTIDES
NT PYRIDINE NUCLEOTIDES
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin. p0241 A73-29850
Refutation of microbial ability to reduce phosphate using thermochemical computations [NASA-TT-F-14724] p0069 N73-13081
Effect of protective barrier creams on toxic alkyl phosphate penetration of pig skin [BMVG-FBWT-72-15] p0138 N73-16076
PHOSPHORIC ACID
Bacterial reduction of organically bound phosphoric acid in blood [NASA-TT-F-14723] p0069 N73-13080
PHOSPHORUS
The sources of phosphorus on the primitive earth - An inquiry. p0090 A73-17933
Effect of acute and chronic hypercapnia on Ca and inorganic P levels in guinea pig blood plasma and erythrocytes [AD-749323] p0258 N73-22035
PHOSPHORUS COMPOUNDS
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT DIPHOSPHATES
NT NUCLEOTIDES
NT ORGANIC PHOSPHORUS COMPOUNDS
NT PHOSPHATES
NT PHOSPHORIC ACID
NT PYRIDINE NUCLEOTIDES
Muscle metabolites with exhaustive static exercise of different duration. p0078 A73-16247
PHOSPHORUS METABOLISM
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint p0166 A73-23943

Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus p0168 A73-24520
Cell membrane molecular structure and lipid composition, discussing phospholipid role in membrane potential maintenance in myocardial cells p0197 A73-25591
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin. p0241 A73-29850
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning p0250 A73-30848
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/. p0358 A73-39602
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man. p0385 A73-41131
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes. p0386 A73-41139
Synthesis rate of phospholipids and cytochromes b5 and P 450 in thiamine-deficient rats after treatment with thiamine [NASA-TT-F-14989] p0334 N73-26064

PHOSPHORYLATION
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria p0154 A73-22368
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain p0389 A73-41278

PHOTOCELLS
U PHOTOELECTRIC CELLS

PHOTOCHEMICAL REACTIONS
NT PHOTOCHROMISM
NT PHOTOSYNTHESIS
NASA supported research in photobiology and photochemistry from 1966 to 1973 [NASA-CR-133459] p0365 N73-27937

PHOTOCHEMISTRY
U PHOTOCHEMICAL REACTIONS

PHOTOCHROMISM
Photochemical receptor mechanism of chromatic vision and scotopic contrast hue sensation due to cone and rod activity interaction p0121 A73-20261

PHOTOELECTRIC CELLS
A combined photoelectric method for detecting eye movements. p0585 A73-12079

PHOTOELECTRICITY
Russian book - Methods of studying eye movements. p0283 A73-32417

PHOTOELECTROMAGNETIC DETECTORS
U RADIATION MEASURING INSTRUMENTS

PHOTOELECTRONICS
U PHOTOELECTRICITY

PHOTOELECTRONS
Electroradiography technique involving photoproduction of free electrons via Townsend avalanche amplification in diode /triode/ gap, noting increased quantum efficiency p0427 A73-44214

PHOTOEMISSIVITY
U EMISSIVITY

PHOTOGRAPH INTERPRETATION
U PHOTOINTERPRETATION

PHOTOGRAPHIC EMULSIONS
NT NUCLEAR EMULSIONS

PHOTOGRAPHIC MEASUREMENT
Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics p0096 A73-18474

PHOTOGRAPHIC RECORDING
Color photographic system using grid projector and telecentric lenses for recording contours of human face for aircrew oxygen mask fitting [RAE-TR-71184] p0141 N73-16099

PHOTOGRAPHIC RECORDING INSTRUMENTS
U OPTICAL MEASURING INSTRUMENTS
U PHOTOGRAPHIC RECORDING
U RECORDING INSTRUMENTS

PHOTOGRAPHY
NT AERIAL PHOTOGRAPHY
NT CHRONOPHOTOGRAPHY
NT CINEMATOGRAPHY
NT COLOR PHOTOGRAPHY
NT ELECTRON PHOTOGRAPHY
NT HOLOGRAPHY
NT INFRARED PHOTOGRAPHY
NT MULTISPECTRAL PHOTOGRAPHY
Thoracic X ray photography technique for tubercular lesion detection in flight personnel, comparing to standard radiography and radioscopy p0586 A73-12155

PHOTOINTERPRETATION
Ancillary information effects on photointerpretation performance under four imagery system operation modes, noting identification accuracy independence on information variables p0093 A73-18245
Scale, haze, and image motion effects on human performance in photointerpretation of aerial photography [AD-763908] p0440 N73-32024

PHOTOLUMINESCENCE
NT X RAY FLUORESCENCE

PHOTOMECHANICS
U PHOTOGRAPHY

PHOTOMETRY
Photometric observations of in situ fluorescence and bioluminescence with Biota in New York Bight [RM-568J] p0252 N73-21978

PHOTON ABSORPTION
U ELECTROMAGNETIC ABSORPTION

PHOTON BEAMS
NT LIGHT BEAMS

PHOTONS
NT LIGHT BEAMS
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses p0160 A73-23308

PHOTOPHILIC PLANTS
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component p0087 A73-17680

PHOTOPIEZOELECTRICITY
U PHOTOELECTRICITY

PHOTORECEPTORS
ERG late photoreceptor potential components time course in macaque monkey cones and rods, noting pure cone foveal response p0046 A73-13761
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures p0060 A73-15789
Rod vision chemistry in terms of rhodopsin, visual cycle and pigment-vision relations, considering dark and light adaptation p0079 A73-16479
Photochemical receptor mechanism of chromatic vision and scotopic contrast hue sensation due to cone and rod activity interaction p0121 A73-20261
Modified rhodopsin in the pigment epithelium. p0121 A73-20263
Book - Physiology of photoreceptor organs. p0160 A73-23301
The structural organization of the compound eye in insects. p0160 A73-23302
Vertebrate photoreceptor cell /rods and cones/ development and structure, discussing light pathway, ciliary connective and microtubules, outer and inner segments, etc. p0160 A73-23303
The structure and reactions of visual pigments. p0160 A73-23306
Light evoked responses in invertebrate photoreceptor cells, considering cell organization, microvilli, lateral eye of Limulus, generator potentials, visual responses, etc

p0160 A73-23307
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses
p0160 A73-23308
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
Receptive fields of retinal ganglion cells.
p0161 A73-23315
Retinal mechanisms of colour vision.
p0161 A73-23316
Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms
p0162 A73-23317
The electroretinogram, as analyzed by microelectrode studies.
p0162 A73-23318
Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay
p0162 A73-23319
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
Light adaptation of the late receptor potential in the cat retina.
p0236 A73-28352
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Human cone optical density estimation implications of conflicting results for luminosity at bleaching intensities in dichromats related to use of psychophysical data
p0246 A73-30402
Monkey rod receptor potential suppression at photopic stimulus intensities by neurophysiological inhibitory mechanism for clearing cone initiated visual pathway
p0345 A73-37412
Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation.
p0346 A73-37413
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Bee image detection by ommatidium based on physical model using electromagnetic analysis of light absorption in photoreceptor
p0424 A73-43344
Three color receptors of Young-Helmholtz and opponent color types of information processing
p0179 N73-19066
Use of photostimulation in electroencephalographic tests of flying personnel and candidates at flight schools
p0218 N73-20111

PHOTOREDUCTION
U PHOTOCHEMICAL REACTIONS
U REDUCTION (CHEMISTRY)

PHOTOSENSITIVITY
NT LIGHT ADAPTATION

Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422
The control of sensitivity in the retina.
p0097 A73-18673
Photosensitized inhibitor formation in isolated, aging chloroplasts.
p0122 A73-20453
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717
Cone spectral sensitivity studied with an ERG method.
p0236 A73-28358
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724

PHOTOSENSORS
U PHOTOELECTRICITY
U RADIATION MEASURING INSTRUMENTS

PHOTOSYNTHESIS

Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
Circadian rhythms - Subcellular and biochemical aspects.
p0089 A73-17824
Photosensitized inhibitor formation in isolated, aging chloroplasts.
p0122 A73-20453
Variable photosynthetic units, energy transfer and light-induced evolution of hydrogen in algae and bacteria.
p0130 A73-21685
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707

Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[COO-3162-9] p0070 N73-13091
Effect of toxic substances on algae by observing photosynthesis determined by oxygen production of algae
[DRIC-TRANS-2991] p0187 N73-19139
Simazine influence on green algae photosynthetic pigments noting chlorophyll luminescence spectra
[DRIC-TRANS-2992] p0258 N73-22040
Effects of atmospheric oxygen concentration on Chlorella photosynthesis
p0262 N73-23032
Comparative studies of photosynthetic activity of pure and mixed crops during vegetative period
p0378 N73-29321
Effects of solar radiation on photomorphogenesis of plants based on spectral distribution of solar energy in daytime
p0378 N73-29322
Photosynthesis of chlorella
p0378 N73-29326
Solar radiation effects on photosynthesis of submerged aquatic plants
p0378 N73-29327

PHOTOTHERMOTROPISM
U TEMPERATURE EFFECTS
PHUGOID OSCILLATIONS
U OSCILLATIONS
U OSCILLATORS
U PITCH (INCLINATION)
PHYSICAL CHEMISTRY
Hemoglobin molecule oxygenation mechanism in various animals, discussing erythrocytes as hemoglobin carriers, ecological factors and physicochemical conditions
p0426 A73-43929

PHYSICAL ENDURANCE
U PHYSICAL FITNESS
PHYSICAL EXAMINATIONS
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717
Detection of atherosclerosis in examinations of flight personnel
p0328 A73-36913
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914
Binocular vision variation with age in flight crews
p0329 A73-36928
Information yield of the Annual Medical Examination for Flying.
p0356 A73-39110
Evaluation of the physical conditions of individual airmen
p0425 A73-43790
Conference on occupational medicine support in NASA programs to prevent health and emotional problems in personnel
[NASA-TM-X-69072] p0142 N73-17048
Medical examinations and protection procedures for NASA employees working in radiologically controlled areas
p0143 N73-17050
Physical exercise and physical fitness program for preventing and treating human coronary heart disease
p0143 N73-17051
Multiphase health screening and medical history questionnaire for preventive/occupational physical examinations
p0143 N73-17052
Automated medical history questionnaire for screening industrial personnel and scheduling physical examinations
p0144 N73-17060
Routine proctosigmoidoscopic examinations of asymptotic NASA personnel for cancer prevention
p0144 N73-17061
Conference on preventive medical and environmental control measures for NASA and aviation industry personnel management
[NASA-TM-X-69073] p0144 N73-17064
Dynamic electrocardiography in periodic health examinations for detection of cardiac abnormalities
p0144 N73-17065
Computerized multivariate scheduling of physical examinations for NASA personnel in clinical intervention program
p0145 N73-17068
Continuous monitoring of hypertension and hypercholesterolemia in NASA employees for prevention of heart disease and disability
p0145 N73-17072
Periodic health examinations and automatic processing of medical histories for detection and prevention of human diseases
p0145 N73-17074
Blood pressure and cholesterol level screening for preventing heart diseases in flight crews of commercial airline
p0146 N73-17076
Latent coronary insufficiency detection in flying personnel using barochamber loading
p0253 N73-21988
Evaluation of energy expenditures and reactions of cardiovascular and respiratory systems to physical work
[NASA-TT-F-15090] p0437 N73-31997
PHYSICAL EXERCISE
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data
p0577 A73-10171
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle.
p0580 A73-10774
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads
p0584 A73-11924
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
Passive and active warm-up effects on track athletes heart and respiration rates
p0042 A73-13123
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Exercise testing for evaluation of cardiac performance.
p0043 A73-13538
Evaluation of cardiac performance in exercise.
p0043 A73-13539
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541
Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545

Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Interdependence of oxygen uptake, heart rate and ventilation during treadmill exercise from regression slope analysis of lag logarithms
p0048 A73-14118
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163
Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing
p0053 A73-14286
Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise
p0053 A73-14293
Telemetrical measurements during sport performance on sportsmen with cardiac arrhytmias.
p0054 A73-14294
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
Influence of different motor regimes on the convulsive reactivity of the central nervous system.
p0085 A73-17178
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
Statistical correlations of maximum oxygen consumption, body weight and endurance /work/ performance in exercise-oxygen studies
p0096 A73-18472
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802
Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842
Controlled tachycardia through voluntary change in exercise regime, investigating relation between heart rate and blood circulation
p0169 A73-24521
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
Effect of physical exercises on the lung rheogram
p0169 A73-24524
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
Effect of body temperature on ventilatory transients at start and end of exercise in man.
p0275 A73-31127
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
Special physical training of pilots as a prophylactic measure against obesity
p0277 A73-31172
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness
p0280 A73-31515
Optimal duration of endurance performance on the cycle ergometer in relation to maximal oxygen intake.
p0283 A73-32397
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
Gravitational stress and exercise.
p0313 A73-35980
Postural effects on respiration, pulmonary ventilation, oxygen uptake and inhalation and exhalation volumes during asana /yoga gymnastics/ exercises executed by athletes
p0322 A73-36573
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains
p0323 A73-36581
Red cell volume with changes in plasma osmolarity during maximal exercise.
p0324 A73-36654
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656

Adequacy of the Haldane transformation in the computation of exercise oxygen consumption in man. p0324 A73-36658
Blood electrolytes and exercise in relation to temperature regulation in man. p0332 A73-36983
Exercise during hyperoxia and hyperbaric oxygenation. p0352 A73-38160
The effect of exercise on intrinsic myocardial performance. p0352 A73-38258
Effects of posture on exercise performance - Measurement by systolic time intervals. p0353 A73-38260
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training. p0357 A73-39482
Anaerobic threshold and respiratory gas exchange during exercise. p0360 A73-39785
Oxygen delivery and oxygen return to the lungs at onset of exercise in man. p0361 A73-39788
Oxygen uptake during maximal work at lowered and raised ambient air pressures. p0386 A73-41132
Effect of training with eccentric muscle contractions on skeletal muscle metabolites. p0390 A73-41523
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise. p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise. p0391 A73-41622
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men. p0399 A73-42342
Work-heat tolerance derived from interval training. p0400 A73-42416
External airway resistance effects on ventilation and carbon dioxide response during human steady state exercise p0400 A73-42417
Climbing and cycling with additional weights on the extremities. p0400 A73-42418
Submaximal exercise with increased inspiratory resistance to breathing. p0400 A73-42419
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization p0405 A73-42835
Ischemic polarcardiographic changes induced by exercise - A new criterion. p0432 A73-44946
Respiratory work minimization during exercise, using respiratory frequency, functional residual capacity and air flow pattern effects as controlled variables p0433 A73-45066
Rebreathing equilibration of CO2 during exercise. p0434 A73-45068
Ventilation at transition from rest to exercise. p0436 A73-45375
Physical exercise and physical fitness program for preventing and treating human coronary heart disease p0143 N73-17051
Long term exercise effects on cardiovascular response in NASA personnel with periodic ergometric evaluation p0145 N73-17067
Physical exercise effects on health of NASA personnel p0145 N73-17069
Feasibility of effective exercise and health evaluation and enhancement program for NASA employees p0147 N73-17091
Influence of NASA stress lab program on physical education in US colleges p0147 N73-17092
Weightlessness simulator for evaluating exercise effects in hypokinetic bed rest test p0256 N73-22018
Exercise and muscle stimulation for preventing metabolism changes during bed rest p0256 N73-22019
Bioelectric monitoring and motion picture surveying for improved physical training of astronauts p0263 N73-23039
Effect of physical and psychological stress on urinary excretions of adrenal harmones in normal man
[NASA-TT-F-15046] p0374 N73-29043
Use of therapeutic exercise for treatment of functional vascular disorders and occlusive lesions of arteries and veins
[NASA-TT-F-15043] p0374 N73-29045
Effects of adverse Northern environment on human physiology and performance under military exercise conditions
[DCIEM-882] p0376 N73-29056

PHYSICAL FACTORS
Radiobiological effects of cosmic radiation in animals and standardization of permissible radiation levels for spacecrews p0173 N73-18102
Physical monitoring and aftereffects of two manned space flights
[NASA-TT-F-15076] p0417 N73-30992

PHYSICAL FITNESS
Practical exercise test for physical fitness and cardiac performance. p0043 A73-13540
Aerobic capacity of relatively sedentary males. p0353 A73-38360
Correlation of assessed maximum oxygen intake with predicted performance in running events
[AD-746867] p0071 N73-13093
Physical exercise and physical fitness program for preventing and treating human coronary heart disease p0143 N73-17051
Influence of NASA stress lab program on physical education in US colleges p0147 N73-17092
Human adaptation to hypoxic hypoxia for increased resistance to physical stress p0182 N73-19095
Effects of physical training on human enzyme activity, carbohydrate metabolism, cholesterol level, and adrenal function
[NASA-TT-F-14826] p0216 N73-29093
Sports medicine - parameters necessary for maintaining competitive form p0227 N73-21114
Variations of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroid in blood during physical work noting physical training dependence
[DLR-FB-72-48] p0412 N73-30072
Influence of personal characteristics on likelihood of decompression sickness
[NASA-CR-135495] p0418 N73-31002
Physical fitness effects on human thermoregulation during exercise
[NASA-TT-F-15142] p0437 N73-32003
Physiological effects on highly trained subjects when confined to bed, deprived of sleep, or allowed to discontinue training
[NASA-CR-134044] p0438 N73-32008
Performance evaluation of training devices for developing human physical fitness
[NASA-CR-134046] p0440 N73-32023

PHYSICAL PROPERTIES
Physical and functional performance properties of laser safety goggles
[AD-746208] p0606 N73-10170
Functional dependence of semicircular canal on physical size p0109 N73-15139

PHYSICAL WORK
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application p0586 A73-12159
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity p0588 A73-12467
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations. p0045 A73-13698

Muscle, skin and esophageal temperature measurement during transient and steady state phases of negative work exercise on bicycle ergometer
p0048 A73-14112
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion
p0080 A73-16696
Energy cost of muscle work in a state of fatigue
p0080 A73-16697
Physical work induced hyperthermia effects on detection rate in visual vigilance task performance in hot and humid environment
p0095 A73-18469
Adenonucleotides, NAD+, and NADN in skeletal muscles during intensive work and at rest
p0116 A73-19475
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Work-heat test comparisons of dry and wet heat and exercise programs for heat acclimatization
p0158 A73-22932
Changes in gaseous metabolism and cardiac output per minute during local muscle work in man
p0164 A73-23809
Ladderail and ergometry - A comparative summary.
p0194 A73-25183
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
Effect of maximal work load on cardiac function.
p0288 A73-33991
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571
Specific features in the activity of the oxygen transport system of the organism during hand-performed working cycles of submaximum intensity
p0323 A73-36579
Physical energy expenditure in long-haul cabin crew.
p0326 A73-36793
The capacity for muscular work in acute hypoxia
p0331 A73-36946
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062
Work, heat, and oxygen cost of various activities of man
p0106 N73-15109
Correlation of physical activity and oxygen consumption between man and mouse [FOA-1-B-1233-A5]
p0149 N73-17106
Adenin-nucleotides NAD(plus) and NADN in skeletal muscles during intensive work and at rest [NASA-TT-F-14856]
p0219 N73-20118
Physiological response to prolonged muscular activity
p0271 N73-23990
Quantitative evaluations of adaptive physical operator/manipulator control systems
p0336 N73-26090
Variations of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroid in blood during physical work noting physical training dependence [DLR-FB-72-48]
p0412 N73-30072
Cooling effects on human tolerance to work induced heat stress and collapse [NASA-CR-134059]
p0438 N73-32005

PHYSIOLOGICAL ACCELERATION
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation.
p0058 A73-15218
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Analysis of vestibular effects in experiments on swings
p0305 A73-34235

PHYSIOLOGICAL DEFENSES
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
Localized shielding effects on antitissue antibody mobilization in irradiated rats
p0064 N73-12086

PHYSIOLOGICAL EFFECTS
NT HEMODYNAMIC RESPONSES
NT PHYSIOLOGICAL RESPONSES
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle.
p0580 A73-10774
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Fatigue in flight personnel during long flights
p0585 A73-12153
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
Passive and active warm-up effects on track athletes heart and respiration rates
p0042 A73-13123
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498
Medical considerations for aircraft passengers.
p0047 A73-13802
Changes in cardiac rhythm during sustained high levels of positive /+Gz/ acceleration. [AD-754146]
p0050 A73-14157
Effect of hydrochlorothiazide on +Gz tolerance in normotensives.
p0050 A73-14159
Wakefulness and sleep states in developing organism, discussing REM sleep deprivation

effects on behavior, brain excitability, pharmacology and biochemistry
p0052 A73-14265
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525
Developments in space medicine.
p0086 A73-17569
Physiological effects of microwave electromagnetic fields on human and animal organisms, considering etiology, diagnostics and prophylaxis
p0093 A73-18256
Mountain inhabitants physiological characteristics due to altitude effects, investigating human tolerance and adaptation to ambient environment
p0116 A73-19212
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
The effect of prolonged immobilization on diuresis and water intake in rats.
p0203 A73-26489
Human respiration under increased pressures.
p0205 A73-26924
Effects of chronic irradiation of dogs with Co-60 gamma rays on the level of auto-antibodies
p0208 A73-27706
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.
p0247 A73-30517
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers
p0248 A73-30519
Physical and psychological effects of electromagnetic fields on human and animal central nervous system
p0248 A73-30571
Heart rate variability analysis for ergonomics purposes, discussing interpolations, algorithms and physiological effects and spectral analysis methods
p0250 A73-30882
The combined influence of microwave radiation and an adverse climate on the organism
p0277 A73-31170
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Work-rest cycle effects on airline pilots performance, considering central nervous system changes measurement techniques
p0282 A73-32059
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
Influence of hypoxia on the release of certain gaseous wastes in white rats
p0304 A73-34228
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
Physiological effects of acceleration and weightlessness during space flight, discussing cardiovascular system, renal function, respiration, blood volume, metabolism, work capacity, etc
[AFOSR-72-2451TR] p0312 A73-35856
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli
p0322 A73-36577
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex
p0384 A73-40750
Biodegradation from evolution viewpoint as physiological function and fundamental cellular process regulating biological equilibrium, explained by intracellular digestion and phagocytic cells association
p0385 A73-41024
Apollo 16 flight program for investigating physiological effects of prolonged weightlessness on central nervous system, vestibular, neuromuscular and cardiovascular functions, metabolism, radiation sensitivity and body weight
p0398 A73-42176
Chronic acceleration effects on homeotherm physiological adaptation in terms of body weight, tolerable field intensity, growth and fat deposition inhibition, etc
p0398 A73-42177
Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994
Effect of prolonged hypokinesia on the higher nervous activity of humans
p0428 A73-44668
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
Physiological and pathological responses of humans exposed to electricity
[NASA-CR-128422] p0592 N73-10065
Physiological effects of 12 submarine personnel during prolonged exposure to sonar signals at 85 db (five day exposure)
[AD-744938] p0594 N73-10087
Statistical analysis of occurrence of backache among Royal Air Force flight crews and ground crews to show effects of crew seats on physical comfort
[AD-745177] p0597 N73-10102
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073
Influence of 45 to 60 day space flight on physiological functions of human body
[NASA-CR-129131] p0609 N73-11074
Physiological and mental performance effects of underwater work on humans
[AD-747701] p0072 N73-13107

Physiological effects of weightlessness
p0105 N73-15099
Tolerance levels, physiological effects, and performance degradation during simultaneous or sequential exposures to environmental stresses
p0106 N73-15110
Clinical neurological and neurophysiological aspects of vestibulo-ocular reflex
p0110 N73-15145
Diurnal dynamics of psychic performance during 72-hour continuous wakefulness
p0135 N73-16056
Physiological effects of high mountain alpinism exercises on human body
p0135 N73-16058
Measurements of endocrine metabolic responses to space flight stress on Apollo 14 and Apollo 15 crewmen
p0173 N73-18105
Toxic effects of metabolic waste gases on rat organisms
p0183 N73-19101
Physiological effects on rats of replacement of atmospheric nitrogen by inert gases at high and low temperatures
p0216 N73-20095
Diver monitoring system for physiologic studies in all hyperbaric environments
[AD-754399] p0224 N73-20154
Physiological effects of long term hypodynamic weightlessness simulation on humans
p0255 N73-22010
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
Antiradiation drug effects on vestibular analyzer functions
p0263 N73-23033
Statistical analysis of effect of simulated sonic booms on sleep patterns of male subjects
[FAA-AM-72-35] p0333 N73-26057
Effects of adverse Northern environment on human physiology and performance under military exercise conditions
[DCIEM-882] p0376 N73-29056
Analysis of physiological effects of diet on personnel of Tenth Soviet Antarctic Expedition
p0379 N73-29358
Physiological effects on highly trained subjects when confined to bed, deprived of sleep, or allowed to discontinue training
[NASA-CR-134044] p0438 N73-32008
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

PHYSIOLOGICAL FACTORS
NT PHYSICAL FACTORS
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload
[DGLR PAPER 72-097] p0584 A73-11666
Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance
p0082 A73-16720
Naval aviator training program dropouts identification in terms of physiological, safety, security, social, self-esteem and self-actualization needs
p0247 A73-30513
U-2 and SR-71 aircrews physiological training for high altitude and supersonic flight hazards, discussing pressure suits, ejection seats, parachutes and survival and life support equipment
p0284 A73-32657
Sudden incapacitation in flight.
p0326 A73-36847
Pilot workload and performance measures in terms of physiological activity in flight deck environment for reduced aircraft accidents due to human error
p0347 A73-37732
Individual physiological differences in evoked potential reactions to light sources, discussing latent periods, potential amplitude distribution and EEG measurement techniques
p0393 A73-41888
Physiological factors in human oculomotor responses to space flight stress
[DR-208-VOL-1] p0109 N73-15136
Physiological factors of human vestibular adaptation to flight and space environments
p0110 N73-15146
Prolonged weightlessness effects on physiological functions of dogs
[NASA-TT-F-14672] p0149 N73-17110
Scientific and engineering studies for Physiology of Chimpanzees in Orbit Program
[NASA-CR-131374] p0220 N73-20129
Physiological method for selecting and observing student pilots in Belgian Air Force for motion sickness
p0226 N73-21099
Physiological aspects of sleep induction in aircrews after prolonged flight times
p0227 N73-21108
Systems analysis of physiological performance related to stresses such as those experienced in high performance aircraft
[AD-754970] p0230 N73-21133
Psychological, physiological, and work hygiene problems in ergonomic technology
[JPRS-58792] p0260 N73-22050
Preflight and flight stress analysis, its relation to circadian rhythms measured in pilot physiological parameters
[DLR-FB-72-39] p0412 N73-30071
Mathematical models and physiological mechanisms of goal-directed behavior
[JPRS-60091] p0447 N73-33053

PHYSIOLOGICAL INDEXES
U PHYSIOLOGICAL TESTS

PHYSIOLOGICAL RESPONSES
NT HEMODYNAMIC RESPONSES
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.
[AD-751735] p0576 A73-10163
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data
p0577 A73-10171
Microvascular responses to alterations in oxygen tension.
p0581 A73-11010
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
Response of single units of the posterior hypothalamus to thermal stimulation.

p0048 A73-14111
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
Design and function of sweat sensor to monitor motion sickness sweat response
p0050 A73-14160
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements
p0060 A73-15787
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHF-11] p0061 A73-15878
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Adaptive hormone action and nonspecific adaptive function of steroid hormones, discussing stress resistance mechanisms of steroids pharmacologically classified as syntoxic and catatoxic
p0155 A73-22536
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Light evoked responses in invertebrate photoreceptor cells, considering cell organization, microvilli, lateral eye of Limulus, generator potentials, visual responses, etc
p0160 A73-23307
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses
p0160 A73-23308
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Sinusoidal stimuli induced electrical activity of hippocampus in waking rhesus monkeys and baboons
p0167 A73-24330
Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy
p0168 A73-24514
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564
Laddermil and ergometry - A comparative summary.
p0194 A73-25183
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647
Mammalian tissue response to subcutaneous and intraperitoneal injection of aqueous suspensions of lunar fine material, noting insolubility in tissue and irritant action
p0203 A73-26484
Human visual evoked response signal decomposition by complex demodulation in terms of after-discharge time, envelope and frequency parameters
p0203 A73-26497
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Estimation of the variability of the latency of responses to brief flashes.
p0204 A73-26720
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens
p0235 A73-28283
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357
Scotopic electroretinography and visual evoked responses under adaptive illumination, comparing blind spot stray light with parafoveal stimulation
p0237 A73-28361
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Saccadic eye movement control system, investigating response characteristics to variously timed pulse stimuli
p0245 A73-30389
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases.
p0247 A73-30515
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
Evoked negative electrical potentials due to auditory zone stimulation by local cooling, mechanical trauma and potential recording, observing reaction regeneration variations
p0276 A73-31159

Reactivity and certain metabolic indices during prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide
p0280 A73-31519
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
Relationship of physiological strain to change in heart rate during work in the heat.
p0283 A73-32548
Sleep behaviour as a biorhythm.
p0286 A73-33158
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
Impact acceleration effects on rabbit central nervous system, noting changes in nerve tissue elements and cerebral vessels
p0304 A73-34227
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
Stereoscopic vision - Cortical limitations and a disparity scaling effect.
p0312 A73-35922
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Optokinetic stimulation of an immobilized eye in the monkey.
p0318 A73-36457
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses
p0322 A73-36578
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
Human physiological responses to high speed aerial tow.
p0330 A73-36939
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep
p0345 A73-37394
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
Book - Pathological effects of radio waves.
p0348 A73-37774
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941
Model of evaporation responses to heat load increases
p0352 A73-38150
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482
Altered susceptibility to motion sickness as a function of subgravity level.
p0358 A73-39486
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2.
p0359 A73-39777
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157
Response delays and the timing of discrete motor responses.
p0387 A73-41177
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve
p0389 A73-41263
Mathematics of interaction between blood and electromagnetic fields.
p0392 A73-41788
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216
Physiological study of dynamics and evolution of chimpanzee complex behavior, considering motor reactions, group behavior and nerve mechanisms of voluntary acts
p0426 A73-43928
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation
p0428 A73-44550
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Abstracts on microwave radiation effects on human and animal physiological functions and life expectancy
[MBL-1972-6]
p0591 N73-10061

Mathematical model for in vivo study of glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
Physiological response of cat semicircular canal dependent units to linear acceleration without angular acceleration
[AMRU-R-70-4] p0607 N73-11061
Effect of space flight on origin, physiological function, and amelioration of coriolis illusion in semicircular canal
[AMRU-R-70-6] p0607 N73-11063
Tests to determine physiological and behavioral response to transitions between rotating and nonrotating environments
[NASA-CR-2130] p0611 N73-11093
Physiological responses to environmental factors related to space flight
[NASA-CR-129518] p0066 N73-12107
Analysis of cosmonaut emotional stress as determined by physiological and behavioral responses
[NASA-TT-F-14654] p0067 N73-12113
Biodynamic response of human head and neck to impact acceleration
[AD-747988] p0072 N73-13106
Influence of time zones on physiological organs and systems and performance of athlete
[NASA-TT-F-14632] p0073 N73-13116
Effects of SO2 decay product toxicity on human physiological functions
p0099 N73-14071
Response of pituitary-thyroid axis to microwave radiation
[VR-3490-149] p0107 N73-15122
Functional dependence of semicircular canal on physical size
p0109 N73-15139
Anti-compensatory oculomotor responses in human visual tracking and vestibulo-ocular mechanism during rotational head movement in flight
p0110 N73-15140
Physiological control system for stabilization of retinal image in humans
p0110 N73-15141
Vestibular stimulation effect in human and animal retinal image stabilization
p0110 N73-15144
Evolution of neural messages in human adaptation to prolonged zero gravity flight
p0111 N73-15154
Physiology of depressed metabolic states and gastrointestinal responses to ionizing radiation
[NASA-CR-130381] p0133 N73-16038
Personality, occupation, and job stress effects on physiological risk factor in human coronary heart disease
p0143 N73-17054
Influence of infrasound on human body functions
p0147 N73-17085
Influence of 100 percent anhydrous ammonia environment on body functions
p0147 N73-17088
Mechanisms for controlling physiological rhythms in Rana pipiens
[NASA-CR-131153] p0179 N73-19064
Effects of space flight noise intensities on human physiological functions
p0180 N73-19080
Immersion effects on human physiological motor functions
p0180 N73-19081
Hypothermy effects on drug actions in physiological rabbit functions
p0212 N73-20064
Dynamics of some characteristics of induced potential of optical region in cerebral cortex in rabbits with increasing hypoxia
p0217 N73-20103
Stress reactions of vestibular apparatus to ionizing radiation, coriolis forces, and gravitational stimuli
[AD-753511] p0220 N73-20132
Physiological stress reactions in simulated flight for pilot selection and training
p0254 N73-22001
Physiological stress effects of space flight on human body
[JPRS-57139] p0254 N73-22002
Functional reactions of human otorhinolaryngolic organs during hypokinesia
p0256 N73-22015
Physiological and hemodynamic adaptations to CO levels and exercise in nonsmoking normal men
[PB-213834/1] p0267 N73-23073
Design of microbial test system for Apollo 16 mission
p0291 N73-24103
Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress
p0291 N73-24106
Analytical gas chromatography and mass spectrography for physiological monitoring of astronauts
[NASA-CR-133272] p0338 N73-27059
Human physiological response to heat stress in preflight operation
[AD-759173] p0338 N73-27060
Physiological responses of flying personnel to multiple stresses
[AD-759565] p0341 N73-27082
Variations of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroid in blood during physical work noting physical training dependence
[DLR-FB-72-48] p0412 N73-30072
Human response to vibration -- test facilities, equipment, experiments and publications
[ISVR-TR-60] p0415 N73-30093
Physical monitoring and aftereffects of two manned space flights
[NASA-TT-F-15076] p0417 N73-30992
Functional state of lymphoid cell in peripheral blood of astronauts and immunoreactivity of individual astronants after space flight
[NASA-TT-F-15089] p0418 N73-30999
Mathematical model and digital computer simulation of cardiovascular control system response to ergometer exercise
p0446 N73-33049

PHYSIOLOGICAL TELEMETRY
U BIOTELEMETRY

PHYSIOLOGICAL TESTS
NT BODY SWAY TEST
NT CARBOXYHEMOGLOBIN TEST
NT EAR PRESSURE TEST
NT VESTIBULAR TESTS

Exercise testing for evaluation of cardiac performance.
p0043 A73-13538
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540
Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
Variability of normal glabellar and supraorbital reflexes in man
p0045 A73-13748
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749
Visual-motor coordination characteristics of parachute jumpers
p0088 A73-17750
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects
p0088 A73-17770
On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511
Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803
Work-heat test comparisons of dry and wet heat and exercise programs for heat acclimatization
p0158 A73-22932

Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362
German monograph - Investigation concerning a consideration of the human circadian rhythm by means of a variable working time.
p0240 A73-29283
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
The significance of pendulum nystagmography in aviation medicine
p0330 A73-36941
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
Functional aging - Present status of assessments regarding airline pilot retirement.
p0387 A73-41161
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization
p0405 A73-42835
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111
Role of social synchronizers in adaptation process of humans to inversion of diurnal sleep and wakefulness regime
p0218 N73-20109
Diagnostic physiological tests for selection and training of flying personnel
[NASA-TT-F-687] p0252 N73-21981
Conditioned reflex motion sickness test of statokinetic fitness for flying personnel
p0254 N73-21994
Physiological stress reactions in simulated flight for pilot selection and training
p0254 N73-22001
Multichannel medical monitoring system to measure physiological parameters from display device at remote control station
[NASA-CASE-MSC-14180-1] p0259 N73-22045
Tracking tasks for clinical evaluation of human movement disorders
[NASA-CR-132275] p0340 N73-27069
Physiological motor function measurements for determining optimal bed rest periods
[NASA-TT-F-15144] p0438 N73-32004

PHYSIOLOGY
NT AUDIOLOGY
NT BODY COMPOSITION (BIOLOGY)
NT ELECTROPHYSIOLOGY
NT HEMATOPOIETIC SYSTEM
NT MENSTRUATION
NT NEUROPHYSIOLOGY
NT PSYCHOPHYSIOLOGY
NT RESPIRATORY PHYSIOLOGY
Book - How man moves: Kinesiological studies and methods.
p0048 A73-13993
Book - Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576
Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns
p0406 A73-42859
Physiology and dimensional analysis of semicircular canal
[AMRU-R-69-1] p0606 N73-11058
Computer controlled infusion pump for time varying input of calcium into physiological systems
[NASA-CASE-ARC-10447-1] p0101 N73-14092
Physiological research in support of manned space flight
[NASA-CR-128741] p0186 N73-19129
Interface requirements for design and development of Physiology of Chimpanzees in Orbit experiment
[NASA-CR-131397] p0220 N73-20130
Circadian phase relationships of physiological functions of isolated monkeys subjected to varying photoperiod phases
p0224 N73-21088
Pathophysiological justifications for using drugs in aerospace medicine
[NASA-TT-F-736] p0257 N73-22033
Influence of monochromatic light on physiological processes of blood
[NASA-TT-F-14941] p0297 N73-25111
Space biology, space medicine, and human physiology
[NASA-TT-F-14964] p0298 N73-25116

PIASECKI MILITARY AIRCRAFT
U MILITARY AIRCRAFT

PIEZOELECTRIC TRANSDUCERS
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields.
p0053 A73-14289

PIEZORESISTIVE TRANSDUCERS
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649
Implantable transducer for in vivo measurement of bone strain.
p0206 A73-27443

PIGMENTS
NT CAROTENE
NT CHLOROPHYLLS
NT CYTOCHROMES
NT MELANIN
NT VISUAL PIGMENTS
Rod vision chemistry in terms of rhodopsin, visual cycle and pigment-vision relations, considering dark and light adaptation
p0079 A73-16479
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399
Chemical characteristics of mushroom pigments and mycological classifications
[NASA-TT-F-14865] p0219 N73-20124
Simazine influence on green algae photosynthetic pigments noting chlorophyll luminescence spectra
[DRIC-TRANS-2992] p0258 N73-22040

PIGS (SWINE)
U SWINE

PILOT ERROR
Identifying pilot error potential in the F-4 aircraft.
p0083 A73-16731
Personal life changes and health stresses in contrast to accident proneness as factors in pilot error
p0083 A73-16732
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation
p0083 A73-16733
Human factor role in flying personnel errors, noting man machine system performance and medical service engagement
p0094 A73-18258
Pilot error evaluation in aircraft accidents, discussing human failure factors and flight and cockpit voice recorder evidence
p0307 A73-34748
Oculogravic illusion factor in theoretical model of pilot control loss in jet aircraft
p0110 N73-15142

Pilot error analysis for airborne navigation procedures
[AD-754214] p0223 N73-20150
Alcohol induced performance degradation in pilot instrument approach landings p0227 N73-21113

PILOT PERFORMANCE
Pilot incapacitation as cause of aircraft accidents, noting age connected cardiovascular disease as leading cause for loss of pilot license p0582 A73-11238
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload
[DGLR PAPER 72-097] p0584 A73-11666
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151
Critical skills and procedures isolation within replacement air group /RAG/ training for F-4 pilot performance prediction p0082 A73-16723
Transinformation and real time identification applied to the study of pilot workload p0085 A73-17195
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions p0087 A73-17689
Functional state alteration of the visual analysor in pilots p0093 A73-18257
Case histories of valvular cardiopathies in military pilots, determining tolerance to flight p0115 A73-19209
Civil aviation medicine in the coming decade. p0117 A73-19484
Pilot incapacitation as cause for aircraft operational risks, discussing flight crews education for emergency situations handling p0170 A73-24717
Aviation medicine assessment of environment effects on pilot responsiveness, task performance and flight safety predictability, considering temperature, oxygen, gravity, acceleration, pressure and stress effects p0193 A73-25039
Implications of psychoanalytic factors for Air Force operations. p0196 A73-25340
Effects of ethyl alcohol on pilot performance. p0237 A73-28501
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases. p0247 A73-30515
Medical diagnosis of pilot performance disturbances from viewpoint of flight surgeon responsibilities p0277 A73-31171
Special physical training of pilots as a prophylactic measure against obesity p0277 A73-31172
Work-rest cycle effects on airline pilots performance, considering central nervous system changes measurement techniques p0282 A73-32059
Annual Scientific Meeting, Las Vegas, Nev., May 7-10, 1973, Preprints. p0287 A73-33421
General aviation pilot operational profile study, discussing implications for airman certification standards, flight safety regulations and aircraft design
[SAE PAPER 730334] p0307 A73-34687
Lone woman pilot sleep patterns and sleep disruptions on global flight across time zones p0307 A73-34745
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth p0307 A73-34746
Military aircraft pilot in-flight consciousness loss etiologies, discussing rapid decompression, hypoxia, dysbarism, seizure, improper maneuver, vasovagal syncope, acceleration sensitivity, etc p0307 A73-34747
Intellectual performance during prolonged exposure to noise and mild hypoxia. p0325 A73-36783
Hypoglycemia in airline pilots. p0326 A73-36790
Further sleep problems in airline pilots on world-wide schedules. p0326 A73-36792
Sudden incapacitation in flight. p0326 A73-36847
Study of Indian naval aircrew experiences and psychic factors in disorientation. p0328 A73-36919
Some characteristics of pilot's performance under complicated flight conditions. p0328 A73-36921
Management of cataract in commercial flight personnel. p0329 A73-36927
The significance of pendulum nystagmography in aviation medicine p0330 A73-36941
Estimation of hypoxia tolerance in a decompression chamber p0331 A73-36945
Ambient temperature rise effects on pilot performance in a flight simulator p0331 A73-36948
Problems related to high-performance flight in the Arctic regions p0332 A73-36953
Pilot workload and performance measures in terms of physiological activity in flight deck environment for reduced aircraft accidents due to human error p0347 A73-37732
Pilot workload immediate, duty day and long term period evaluation from heart rate, subjective, psychological, biochemical stress and sleep pattern measurements p0347 A73-37734
Aircrew workload during the approach and landing. p0351 A73-38005
Aircraft pilot spatial disorientation and illusory perceptual break-off sensations during flight associated with minor vestibular asymmetry p0356 A73-39111
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971. p0356 A73-39112
Ocular tension in flying personnel p0383 A73-40347
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests. p0387 A73-41157
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior. p0387 A73-41158
Barotrauma in United States Air Force accidents/incidents. p0387 A73-41160
Functional aging - Present status of assessments regarding airline pilot retirement. p0387 A73-41161
Monocular pilot ability in securing and retaining license as compared to controls p0387 A73-41163
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110
Human operator model for man machine control behavior in biodynamic flight environment p0597 N73-10105
Control theory model for pilot decision making based on estimated state of linear plant p0597 N73-10107
Design of computerized airborne traffic display device with alphanumerical control for aircraft pilots p0598 N73-10112
Runway separation standards according to reaction time of pilot manual control response to air traffic controller communication p0598 N73-10113

Predictive display with continuous parameter tracking for quasi-linear model of human pilot transfer function in closed loop system
p0599 N73-10120
Optimal control model for predicting display requirements in pilot landing performance
p0599 N73-10121
Improved pilot performance using simulated pictorial landing display with symbols
p0599 N73-10122
Visual display format effects on pilot describing functions in manual tracking performance
p0599 N73-10123
Magnetic data tapes containing measurements of pilot scanning behavior, control response and vehicle response during simulated instrument landing approaches
p0600 N73-10124
Pilot visual threshold and perception for aircraft movement estimation during unaided visual approach control
p0600 N73-10125
Effect of automatic landing system display on pilot information requirements
p0600 N73-10126
Optimal control model for predicting manual VTOL pilot performance in longitudinal hovering tasks
p0601 N73-10134
Serial segments method for measuring pilot manual control remnant in vicinity of sine waves
p0601 N73-10136
Motion cue effects on pilot manual control tracking task
p0602 N73-10141
Dynamic model for pilot manual control ability using aural compensatory tracking
p0602 N73-10142
Simulator facility used to determine vibration effects on pilot tracking performance using rigid control stick
[AD-745193] p0605 N73-10164
Effect on pilot performance and comfort of active vibration isolation system for commercial transport pilot seat
[NASA-CR-2146] p0066 N73-12109
Analysis of pilot performance in evaluating three types of aircraft altimeters during C-135B simulator flight
[ASD-TR-72-63] p0074 N73-13117
Computerized fast Fourier transform technique for measuring human performance in compensatory tracking task
[AD-748659] p0100 N73-14078
Human factors engineering to determine maximum control forces capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
Conceptual model for pilot workload
p0142 N73-17010
Pilot performance during simulated standard instrument procedure turn with and without predictor display
[NASA-TM-X-62201] p0150 N73-17118
Measurements of acceleration stress effects on pilot maneuvering ability and flight control performance
[AMRL-TR-72-3] p0189 N73-19154
Drug therapy effects on flying effectiveness and psychosomatic fitness of flying personnel
p0226 N73-21103
Chemotherapy for air crews in Great Britain
p0226 N73-21105
Pilot performance and sleep patterns in long duration flights and control of hypnotic drug and alcohol use
p0226 N73-21107
Adaptive tracking task for evaluating drug after-effects on human flight performance
p0227 N73-21109
Pilot performance under certain hypnotic, tranquilizer, and barbiturate type drugs
p0227 N73-21110
Effects of isoniazid treatment on pilot performance
p0227 N73-21111
Alcohol reference method for predicting drug modifications of central nervous system activity and pilot performance decrease
p0227 N73-21112
Alcohol induced performance degradation in pilot instrument approach landings
p0227 N73-21113
Performance tests to determine capability of aircraft pilots to avoid midair collisions based on visual perception of target and information from pilot warning indicator
p0231 N73-21146
Photographic recording of aircraft in near midair collision conditions to determine feasibility of collision avoidance based on visual perception of pilot
[CDC-J1-5] p0231 N73-21147
Analysis of flight tests to determine range of visual detection of aircraft as basis for visual perception to avoid midair collisions
p0231 N73-21148
Age limits and flight fitness of civil aviation pilots
p0254 N73-21999
Psychometric criteria for pilot performance in F-4 aircraft fleet
[AD-755184] p0269 N73-23087
Pilot performance in dual time-sharing tracking task
[AD-755363] p0269 N73-23088
Monte Carlo simulation for man machine task sequencing considering pilot performance degradation
p0270 N73-23899
Correlation between instructor rating of students and successful completion of military flight training course
[AD-757693] p0296 N73-24146
Changes in diurnal variations of pilot performance in flight simulator compared with performance after transatlantic flights
[DLR-FB-73-25] p0298 N73-25122
Limitations on pilot visual perception of target from low flying aircraft
[AD-759651] p0300 N73-25136
Diagnosis and prognosis of pilot reaction and tolerance to psychical stress
p0368 N73-27962
Tracking performance during whole-body vibration with side-mounted and center mounted control sticks
[AD-761798] p0370 N73-27971
Preflight and flight stress analysis, its relation to circadian rhythms measured in pilot physiological parameters
[DLR-FB-72-39] p0412 N73-30071
Medical evaluation of pilots using onboard flight recorders
p0416 N73-30986
Performance decrement and response time of current and noncurrent jet Naval pilots
[AD-761463] p0421 N73-31025
Pilot performance under simulated conditions of modified aircraft control dynamics, navigational task complexity, and induced stress
[AD-764760] p0441 N73-32025
Kalman filter estimation of aircraft pilot performance
[AD-764694] p0441 N73-32026

PILOT SELECTION
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
Naval aviator training program dropouts identification in terms of physiological, safety, security, social, self-esteem and self-actualization needs
p0247 A73-30513
Jet procedures trainer for pilot transition from straight wing propeller plane to swept wing jets, discussing pilot instruction and selection
p0275 A73-31095
Clinical procedures for selecting pilot personnel based on predisposition to motion sickness
p0225 N73-21094
Physiological method for selecting and observing student pilots in Belgian Air Force for motion sickness
p0226 N73-21099
Diagnostic physiological tests for selection and training of flying personnel
[NASA-TT-F-687] p0252 N73-21981
Physiological stress reactions in simulated flight for pilot selection and training
p0254 N73-22001

Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 1
[AD-756638] p0296 N73-24143
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 2
[AD-756639] p0296 N73-24144
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 3
[AD-756640] p0296 N73-24145
Experimental research in underwater medicine, flight stress, and pilot selection
[DLR-FB-73-15] p0367 N73-27951
Pilot selection by means of concentration stress test
p0368 N73-27957
Diagnosis and prognosis of pilot reaction and tolerance to psychical stress
p0368 N73-27962

PILOT TRAINING
Critical skills and procedures isolation within replacement air group /RAG/ training for F-4 pilot performance prediction
p0082 A73-16723
Computer-assisted instruction in pilot training and certification.
p0082 A73-16724
The isolation of critical elements within selected maneuvers during primary flight training.
p0083 A73-16727
Realistic pilot training and aircraft handling qualities in pilot error risk minimization for military, commercial and general aviation
p0083 A73-16733
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
Jet procedures trainer for pilot transition from straight wing propeller plane to swept wing jets, discussing pilot instruction and selection
p0275 A73-31095
Objectives of training in relation to accident prevention.
p0326 A73-36850
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft.
p0386 A73-41154
Stress and strain in student helicopter pilots.
p0386 A73-41155
Effectiveness of synthetic fixed wing flight training equipment for military purposes
[AD-744447] p0604 N73-10158
Performance evaluation of airborne audio-video recording system as training device in A-7D tactical fighter
[AD-744041] p0605 N73-10161
Data management system for prediction of Naval student pilot performances
[AD-744984] p0613 N73-11104
Motion effects in pilot reactions to ground-based flight simulator display evaluation
[AD-749370] p0075 N73-13126
Systems engineering methods for human performance enhancement in signal detection and flight control
[AD-748239] p0102 N73-14098
Validity of ground training for developing flying skill during pilot training
[AD-749621] p0113 N73-15168
Operational effectiveness of jet flight training simulator
[AD-750248] p0113 N73-15170
Human performance in sequential task training for acquisition of perceptual motor skills under flight stress
p0189 N73-19153
Motion sickness questionnaire and field independence scores as predictors of success in Naval aviation training
p0225 N73-21097
Visual cue reinforcement for skill retention in pilot simulated space vehicle approach and landing performance
[NASA-CR-128912] p0269 N73-23086
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 1
[AD-756638] p0296 N73-24143
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 2
[AD-756639] p0296 N73-24144
Development of cost effective program for training naval fixed wing pilots in 1974 to 1986 time period - Vol. 3
[AD-756640] p0296 N73-24145
Correlation between instructor rating of students and successful completion of military flight training course
[AD-757693] p0296 N73-24146
Aerial combat acceleration environment testing of human performance capability using human centrifuges
[AD-759174] p0300 N73-25134
Pilot ground training proficiency of flight simulators
[AD-755681] p0341 N73-27081
Relations between sociometric variables and criteria of ability and behavior of student pilots
p0367 N73-27954
Combat job performance and training for air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027
Optimization of human performance in system design, training, and operation
[AD-764761] p0450 N73-33075

PILOTED CENTRIFUGES
U HUMAN CENTRIFUGES

PILOTS
Human physiological response to heat stress in preflight operation
[AD-759173] p0338 N73-27060
Inflight heart and respiratory rate recording of pilots, using nose clip transducers
p0367 N73-27953

PILOTS (PERSONNEL)
NT AIRCRAFT PILOTS
NT TEST PILOTS
Flight stress effects on cardiovascular reactions of pilots with atherosclerosis
p0064 N73-12090
Criterion development in replacement air group, using F-4 aircraft
[AD-748195] p0104 N73-14111
Measurement and effects of triaxial vibration on pilots in P-531 (Scout) helicopter under different flight conditions
[ISVR-TR-58] p0141 N73-16100
Color aptitude of dyschromatopsia French navigators and pilots
p0179 N73-19068
Influence of long duration flight missions on metabolic and endocrine functions of pilots and navigators
p0189 N73-19152
Management of asymptomatic carriers of hepatitis associated antigen in Hellenic Air Force personnel
p0265 N73-23060
Application of hologram optical element to pilot head-up display
[AD-758057] p0295 N73-24139

PINEAL GLAND
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300

PIONS
Delta ray particle track structure theory for radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields
p0196 A73-25423

PIPE FLOW
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow
p0126 A73-21375

PITCH
Mathematical model of human pitch perception based on acoustic stimulus Fourier transformation by sense organ into peripheral neural activity pattern recognition

p0393 A73-41816
Human perception of musical intervals between simultaneous tones
[IZF-1972-20] p0268 N73-23078
PITCH (INCLINATION)
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
PITCH ANGLES
U PITCH (INCLINATION)
PITUITARY GLAND
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661
Response of pituitary-thyroid axis to microwave radiation
[VR-3490-149] p0107 N73-15122
PITUITARY HORMONES
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular
p0157 A73-22926
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286
PLANETARY ATMOSPHERES
NT JUPITER ATMOSPHERE
NT MARS ATMOSPHERE
Metabolism and propagation of microbes in outer planets
[NASA-CR-131091] p0186 N73-19127
Metabolism and propagation of microbial contamination in planetary atmospheres
[NASA-CR-133638] p0375 N73-29049
PLANETARY ENTRY
U ATMOSPHERIC ENTRY
PLANETARY ENVIRONMENTS
NT JUPITER ATMOSPHERE
NT MARS ATMOSPHERE
NT MARS ENVIRONMENT
NT PLANETARY ATMOSPHERES
PLANETARY EXPLORATION
U SPACE EXPLORATION
PLANETARY EXPLORER
U OUTER PLANETS EXPLORERS
PLANETARY LANDING
Analysis of standards and precedures for planetary quarantine with emphasis on determination of mission specifications
[NASA-CR-130558] p0148 N73-17103
Sterilization for unmanned landers
[NASA-CR-133742] p0411 N73-30064
PLANETARY QUARANTINE
Quarantine necessity, protocol and effectiveness for Mars samples, emphasizing risks of foreign replicating agent introduction to earth biosphere
p0056 A73-14321
Sterilization technology in the United States space program.
p0288 A73-33697
Ten years of development of the Planetary Quarantine Program of the United States.
p0313 A73-35966
Lunar sample quarantine procedures - Interaction with non-quarantine experiments.
p0313 A73-35978
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972.
p0395 A73-42158
Developments in the analysis of planetary quarantine requirements.
p0395 A73-42159
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161
Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards
p0396 A73-42162
Planetary quarantine procedures for reduction of microbial burden on spacecraft
[NASA-CR-129793] p0070 N73-13086
Soil sampling and microorganism analysis in planetary spacecraft assembly area for prevention of Mars contamination
[NASA-CR-130009] p0135 N73-16059
Analysis of standards and precedures for planetary quarantine with emphasis on determination of mission specifications
[NASA-CR-130558] p0148 N73-17103
Effects of planetary quarantine constraints on advanced planetary mission planning
[NASA-CR-130861] p0176 N73-18123
Metabolism and propagation of microbes in outer planets
[NASA-CR-131091] p0186 N73-19127
Planning and source allocation for planetary quarantine measures for interplanetary automated spacecrafts
[NASA-CR-131291] p0220 N73-20126
Bibliography of citations relating to planetary quarantine from 1966 to 1971
[NASA-CR-131889] p0258 N73-22038
Microbial burden estimation for planning planetary quarantine of advanced spacecraft
[NASA-CR-131845] p0258 N73-22039
Microbiological studies of Apollo 17 command module preflight and postflight samples
[NASA-CR-132022] p0265 N73-23056
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116
Spacecraft microbial burden reduction for Jupiter due to atmospheric entry heating
[NASA-CR-132072] p0292 N73-24117
Sixth supplement to bibliography on planetary quarantine with indexes
[NASA-CR-131817] p0297 N73-25112
Development of planetary quarantine measures for automated spacecraft
[NASA-CR-133202] p0334 N73-26066
Planetary quarantine requirements for automated spacecraft flights
[NASA-CR-135795] p0445 N73-33040
Satellite quarantine constraints in outer planet mission planning
[NASA-CR-135791] p0445 N73-33041
PLANETARY SATELLITES
U NATURAL SATELLITES
PLANETARY SPACE FLIGHT
U INTERPLANETARY FLIGHT
PLANETARY SPACECRAFT
U INTERPLANETARY SPACECRAFT
PLANETARY SURFACES
NT MARS SURFACE
PLANETS
NT EARTH (PLANET)
NT EXTRASOLAR PLANETS
NT JUPITER (PLANET)
NT MARS (PLANET)
PLANKTON
Seasonal plankton collections conducted during Tenth Antarctic Expedition
p0379 N73-29363
PLANKTON BLOOM
U PLANKTON
PLANNING
NT MISSION PLANNING
NT PRODUCTION PLANNING
PLANOTRONS
NT CATHODE RAY TUBES
PLANTS (BOTANY)
NT ALGAE
NT AUTOTROPHS
NT BACILLUS
NT BACTERIA
NT BLUE GREEN ALGAE
NT CHLORELLA
NT CORN
NT DECIDUOUS TREES
NT ESCHERICHIA
NT FUNGI
NT LEAVES
NT NITROBACTER
NT PHOTOPHILIC PLANTS
NT PSEUDOMONAS
NT RHIZOPUS
NT SPORES
NT STAPHYLOCOCCUS

NT STREPTOCOCCUS
NT THERMOPHILIC PLANTS
NT TOBACCO
NT TREES (PLANTS)
NT YEAST
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes
p0202 A73-26482
Plant growth response to low temperature and UV treatment, discussing chlorophyll synthesis, carbohydrate levels, ion balance and enzyme characteristics
p0203 A73-26486
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
The evolution of lignin - Experiments and observations.
p0241 A73-29649
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments
p0397 A73-42172
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
Mathematical model for photosynthetic gas exchanges in growing wheat and radish biopaks of life support systems
p0063 N73-12081
Time periods for nutrient solution exchange in optimal biomass yield on porous aggregate
p0183 N73-19106
Hydroponic cultivation of plants on clay filters from human mineralized feces
p0184 N73-19110
Thermal combustion requirements for burner devices of human vegetative waste products
p0184 N73-19111
Gas chromatography-mass spectrometry for analyzing fatty acid and sterol concentrations in plant tissue samples
[NASA-CR-126740] p0186 N73-19131
Photometric observations of in situ fluorescence and bioluminescence with Biota in New York Bight
[BM-568J] p0252 N73-21978
Thermal effects of microwave and radio frequency radiation on biological systems
[MBL-1971-7-PT-1] p0264 N73-23048
Cytological changes in pine tissues treated with lunar materials collected on Apollo 12 quarantine mission
[NASA-CR-128914] p0265 N73-23054
Development of germ-free plants and tissues
[NASA-CR-128947] p0293 N73-24122
Physical and biomedical research by earth orbiting space stations
[AD-756771] p0294 N73-24126
Effects of solar radiation on photomorphogenesis of plants based on spectral distribution of solar energy in daytime
p0378 N73-29322
Effects of radiation and heat balance of active surface on life processes of plants with emphasis on productivity of cotton
p0378 N73-29323
Solar radiation effects on photosynthesis of submerged aquatic plants
p0378 N73-29327
Simulation of growth and mineral uptake by plants growing in lunar soil
[NASA-CR-134036] p0416 N73-30988
PLANTS (INDUSTRIES)
U INDUSTRIAL PLANTS
PLASMA ARC SPRAYING
U PLASMA SPRAYING
PLASMA LOSS
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews
p0174 N73-18106
PLASMA SPRAYING
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169
Obtaining stable oxygen electrodes by coating with plasma catalyzed polymer film
[AD-748422] p0074 N73-13120
PLASMAS (PHYSICS)
NT SOLAR WIND
PLASTIC COATINGS
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions
p0395 A73-42055
Obtaining stable oxygen electrodes by coating with plasma catalyzed polymer film
[AD-748422] p0074 N73-13120
PLASTIC DEFORMATION
Torsional elasticity of human skin in vivo.
p0391 A73-41625
PLASTIC FILMS
U POLYMERIC FILMS
PLASTIC MATERIALS
U PLASTICS
PLASTIC PROPERTIES
Russian book on structural and functional plasticity of interneuron synapses during readjustment to chemical and physical damage covering degenerative and regenerative changes
p0389 A73-41280
PLASTIC YIELDING
U PLASTIC DEFORMATION
PLASTICITY
U PLASTIC PROPERTIES
PLASTICS
NT POLYVINYL ALCOHOL
Erythrocyte preservation in blood transfusion practice by cryogenic freezing with polyvinylpyrrolidone
[NASA-TT-F-14590] p0069 N73-13076
PLASTISOLS
NT SMOKE
PLATELETS
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
PLAYA LAKES
U LAKES
PLENUM CHAMBERS
Design and performance of exhaust hood with protective air current outside of hood surface
p0144 N73-17063
PLETHYSMOGRAPHY
NT ELECTROPLETHYSMOGRAPHY
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies
p0193 A73-25041
Angiotensiotonography using an air plethysmograph
p0322 A73-36575
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666
A new method of measuring arterial dilation and its application.
p0402 A73-42669
Comparison of plethysmographic and electromagnetic flow measurements.

p0427 A73-44215
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067
PLEURAE
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
PLSS
U PORTABLE LIFE SUPPORT SYSTEMS
PLUMES
NT ROCKET EXHAUST
PLUTONIUM
NT PLUTONIUM 238
PLUTONIUM ISOTOPES
NT PLUTONIUM 238
PLUTONIUM 238
Pu-238 grade fuels for supplying power to artificial heart and circulatory assist devices [LA-DC-72-473] p0067 N73-12115
PLUVIOGRAPHS
U RECORDING INSTRUMENTS
PNEUMATIC CONTROL
Application of pneumatically controlled prosthetic arm to industrial handling problems [NASA-TT-F-14628] p0073 N73-13115
Pneumatic foot pedal operated fluidic exercising device [NASA-CASE-MSC-11561-1] p0439 N73-32014
PNEUMATIC EQUIPMENT
NT GAS VALVES
Development and characteristics of inflatable airbag restraint system for use in general aviation aircraft [FAA-RD-73-3] p0299 N73-25127
PNEUMATIC RESET
U PNEUMATIC CONTROL
PNEUMOGRAPHS
U PNEUMOGRAPHY
PNEUMOGRAPHY
Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing
p0053 A73-14286
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
Electrical operational and pneumatic /variometer/ differentiation recording of displaced volume derivative from pneumotachograph in spontaneous breathing
p0159 A73-22937
PNEUMONIA
Course of infectious process and functional activity of pulmonary macrophages in mice confined to atmosphere with high oxygen content
p0442 N73-33016
POIKILOTHERMIA
NT AMPHIBIA
NT FROGS
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612
POISONING
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
Epinephrine oxidation and indole production during high pressure oxygen poisoning [AD-759405] p0339 N73-27061
POISONING (TOXICOLOGY)
U TOXIC DISEASES
POISONS
NT ENDOTOXINS
POISSON PROCESS
U STOCHASTIC PROCESSES
POLAR COORDINATES
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946
POLAR REGIONS
NT ANTARCTIC REGIONS
NT ARCTIC REGIONS
POLARIZATION (CHARGE SEPARATION)
NT ELECTROLYTIC POLARIZATION
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
POLARIZATION CHARACTERISTICS
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
POLARIZED ELECTROMAGNETIC RADIATION
NT POLARIZED LIGHT
POLARIZED LIGHT
Scattering of polarized light by rough and smooth leaf surfaces
p0378 N73-29333
POLARIZED RADIATION
NT POLARIZED LIGHT
POLAROGRAPHS
U POLAROGRAPHY
POLAROGRAPHY
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
p0056 A73-14647
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique
p0153 A73-21871
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
POLLUTANTS
U CONTAMINANTS
POLLUTION
NT AIR POLLUTION
NT ENVIRONMENT POLLUTION
NT NOISE POLLUTION
NT THERMAL POLLUTION
NT WATER POLLUTION
POLYCYTHEMIA
Cobalt compound administration effects on hypoxic stress control, testing polycythemic response and cobalt retention in rats
p0307 A73-34744
POLYMER CHEMISTRY
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products.
p0202 A73-26479
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
POLYMER PHYSICS
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials
p0087 A73-17681
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
POLYMERIC FILMS
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169

Megarad plastic film dosimeter.
p0427 A73-44212
POLYMERIZATION
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
POLYMERS
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
Changes in oxygen consumption in rats after inoculation with polymer combustion products
p0182 N73-19096
Absorption of bile acids and cholesterol by polymers
p0191 N73-19976
POLYMORPHISM
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033
POLYNOMIALS
Mathematical analysis of body surface potentials.
p0059 A73-15646
POLYSACCHARIDES
NT CELLULOSE
NT DEXTRANS
NT GLYCOGENS
NT STARCHES
POLYURETHANE FOAM
Spacecraft polyurethane foam jacket sterilization by gas method, discussing ethylene oxide and methyl bromide sorption and desorption
p0395 A73-42160
POLYVINYL ALCOHOL
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483
POPULATIONS
Biostatistics of genetical processes in human populations
[NASA-CR-131508] p0229 N73-21131
PORPHINES
Abiogenic formation of porphin, chlorin and bacteriochlorin.
p0090 A73-17934
PORPHYRINS
NT CHLOROPHYLLS
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples.
p0202 A73-26481
PORTABLE EQUIPMENT
Portable electronic thermometer for temperature measurement during exercise elevation of body temperature in heat acclimatization experiment
p0169 A73-24567
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
PORTABLE LIFE SUPPORT SYSTEMS
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Mercury, Gemini and Apollo space suits, discussing glove development, boot design, portable life support equipment and extravehicular mobility
p0289 A73-34025
Regenerable CO2 sorbent formulation and fabrication for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
Guidelines for extravehicular and intravehicular activities during space shuttle operation with emphasis on contingency situations - Vol. 2
[NASA-CR-133992] p0419 N73-31007
Pressure suit requirements and characteristics for space shuttle personnel performing EVA and IVA activities - Vol. 3
[NASA-CR-133993] p0419 N73-31008
POSITION (LOCATION)
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331
POSITION ERRORS
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
POSITION INDICATORS
NT RADIO DIRECTION FINDERS
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
Position reporting and communications systems of aviation and marine rescue operations
[AD-761756] p0369 N73-27967
POSITION SERVOS
D SERVOMOTORS
POSITIONING
Positioning accuracy with binary selective and fixed gain manual control systems, using finger stick control for operator performance tests
p0284 A73-32583
Human horizontal or antiorthostatic position effect in hypodynamic weightlessness test
p0255 N73-22011
Screw calculus in kinematic and power analyses on spatial positions of manipulator link mechanisms
p0336 N73-26092
POSTFLIGHT ANALYSIS
Radioactivity urinalysis for calculating postfight astronaut cosmic radiation exposure
[NASA-CR-133378] p0365 N73-27939
POSTURE
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
The interaction between muscle groups in a complex motor act in humans
p0125 A73-21320
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus
p0199 A73-26087
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Postural effects on respiration, pulmonary ventilation, oxygen uptake and inhalation and exhalation volumes during asana /yoga gymnastics/ exercises executed by athletes
p0322 A73-36573
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565
Effect of lateral body tilts and visual frames on perception of the apparent vertical.
p0392 A73-41736
Human sensorimotor coordination following space flights.
p0397 A73-42170

Whole body, plus or minus a(z) vibration on amplitude and frequencies of postural sway in human subjects
[AD-745580] p0596 N73-10098
Dynamic model for nonlinear simulation of human postural control system using sticks
p0599 N73-10116
Regulation of vertical posture after Soyuz 6, 7, and 8 flights and after 120-day bed rest experiment
p0134 N73-16052
Instrument for measurement of postural equilibrium in human beings
[AD-763096] p0377 N73-29067

POTABLE LIQUIDS
NT POTABLE WATER

POTABLE WATER
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
Environmental health measures to prevent cabin atmosphere toxicity and provide drinking water standards in manned space flight applications
p0144 N73-17058

POTASSIUM
NT POTASSIUM ISOTOPES
High intensity noise effects on urinary K-Na ratios in rats
p0371 N73-29018

POTASSIUM CHLORIDES
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990

POTASSIUM COMPOUNDS
NT POTASSIUM CHLORIDES
NT POTASSIUM OXIDES
Potassium ferrioxalate actinometric measurements of solar ultraviolet photobiological energy
p0292 N73-24113

POTASSIUM ISOTOPES
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757

POTASSIUM OXIDES
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951

POTENTIAL ENERGY
NT BIOELECTRIC POTENTIAL
NT SPIKE POTENTIALS

POTTING COMPOUNDS
Nonsporicidal methods for solvent degradation of cured RTV 41 silicon potting compound and chemical curing effects on decontamination properties
[NASA-CR-130720] p0149 N73-17111

POWDER (PARTICLES)
NT FINES
NT METAL POWDER

POWDERED METALS
U METAL POWDER

POWER SPECTRA
Operator remnant power spectral density measurement during compensatory tracking task by serial segments method, noting Fourier coefficient processing
p0578 A73-10324
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
Signal and noise in the human oculomotor system.
p0407 A73-42964
Serial segments method for measuring pilot manual control remnant in vicinity of sine waves
p0601 N73-10136

POWER SUPPLIES
Pu-238 grade fuels for supplying power to artificial heart and circulatory assist devices
[LA-DC-72-473] p0067 N73-12115
Power sources and requirements for human artificial hearts
[COO-2155-4] p0102 N73-14095

POWER SUPPLY CIRCUITS
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823

PREAMPLIFIERS
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280
A universal preamplifier for bioelectric signals
p0383 A73-40345

PRECAMBRIAN PERIOD
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723

PRECAUTIONS
U ACCIDENT PREVENTION

PRECIPITATION (METEOROLOGY)
NT SNOW COVER

PREDICTION ANALYSIS TECHNIQUES
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
Predicting coronary heart disease.
p0244 A73-30351
A model of the human in a cognitive prediction task.
p0399 A73-42223

PREDICTIONS
NT LINEAR PREDICTION
NT PERFORMANCE PREDICTION
Risk scoring system for identifying subjects with high risk to coronary heart disease
p0146 N73-17080

PREDICTORS
U PREDICTIONS

PREFLIGHT ANALYSIS
Preflight and flight stress analysis, its relation to circadian rhythms measured in pilot physiological parameters
[DLR-FB-72-39] p0412 N73-30071

PREGNANCY
Aircraft cabin altitude hypoxia effects on mother, embryo and fetus during first trimester of pregnancy in air hostesses and women passengers
p0248 A73-30519

PREHEATING
U HEATING

PRESBYOPIA
The problem of early presbyopia in aircrew.
p0329 A73-36923
Visual problems among senior flight personnel.
p0329 A73-36924

PRESELECTORS
U PREAMPLIFIERS

PRESERVATIVES
Preservatives for human urine storage and water reclamation in spacecraft cabin
p0183 N73-19099

PRESSURE
NT ATMOSPHERIC PRESSURE
NT BLOOD PRESSURE
NT GAS PRESSURE
NT HIGH ALTITUDE PRESSURE
NT HIGH PRESSURE
NT HYDROSTATIC PRESSURE
NT HYPERTENSION
NT HYPOTENSION
NT HYPOXEMIA
NT ILLUMINANCE
NT IMPACT LOADS
NT INTRACRANIAL PRESSURE
NT INTRAOCULAR PRESSURE
NT LUMINANCE
NT LUMINOUS INTENSITY
NT OVERPRESSURE
NT OXYGEN TENSION
NT PARTIAL PRESSURE
NT SYSTOLIC PRESSURE

PRESSURE BREATHING
Human respiration under increased pressures.
p0205 A73-26924
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.

p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944
Positive-pressure breathing as a protective technique during +Gz acceleration.
p0361 A73-39793
Positive pressure breathing for increased human acceleration tolerance
p0189 N73-19156

PRESSURE CABINS
U PRESSURIZED CABINS

PRESSURE CHAMBERS
NT HYPERBARIC CHAMBERS
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
Coding data of 2565 individual human altitude chamber tests
[NASA-CR-114550] p0136 N73-16066
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
Pressure chambers for testing effect of oxygen inspiration on fatigue during flight
[JPRS-59041] p0264 N73-23051

PRESSURE DISTRIBUTION
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449

PRESSURE EFFECTS
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
Medical considerations for aircraft passengers.
p0047 A73-13802
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus hematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet.
p0195 A73-25327
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066
Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man
p0249 A73-30845
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
Food heating tests in different atmospheres
[NASA-CR-134040] p0419 N73-31012

PRESSURE FIELDS
U PRESSURE DISTRIBUTION

PRESSURE GAGES
NT MANOMETERS
NT OSMOMETERS

PRESSURE GRADIENTS
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129
Pressure gradient measurements in swine and rats submitted to pressure pulses
[DLR-FB-71-72] p0113 N73-15164

PRESSURE MEASUREMENTS
Ocular tonus measurements for glaucoma detection in flying personnel, discussing subsequent test procedures in case of abnormal findings
p0586 A73-12158
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart.
p0053 A73-14291
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888

PRESSURE MICROPHONES
U MICROPHONES

PRESSURE PROBES
U PRESSURE SENSORS

PRESSURE PULSES
Tactile information presentation using high pressure pulses into anti-G suit
[AD-761796] p0369 N73-27969

PRESSURE RECORDERS
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300

PRESSURE REDUCTION
Medical considerations for aircraft passengers.
p0047 A73-13802
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Theoretical trans-respiratory pressure during rapid decompression. I Model experiment. II - Animal experiments.
p0154 A73-22530
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234
Mortality rate of guinea pigs after decompression treatment as function of water balance
[DLR-FB-71-20] p0099 N73-14075
Lower body decompression effects on human cardiovascular hemodynamic system
p0373 N73-29032

PRESSURE REGULATORS
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125

PRESSURE SENSORS
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649

Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Initial systole and dicrotic notch detecting circuitry for monitoring arterial pressure pulse
[NASA-CASE-LEW-11581-1] p0178 N73-18139
Design and performance of strain gage transducer as blood pressure recording device
p0231 N73-21144

PRESSURE SUITS
NT SPACE SUITS
Nutrition systems for pressure suits.
p0355 A73-39105
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786
Tactile information presentation using high pressure pulses into anti-G suit
[AD-761796] p0369 N73-27969
Design approaches to application of Boyle's law to emergency suits for fliers
[AD-761797] p0369 N73-27970
Performance of anti-G valve subjected to varying acceleration forces
[AD-760814] p0377 N73-29062
Equipment requirements for space shuttle EVA/IVA pressure suit, life support system, mobility aids, vehicle support provisions, and emergency support
[NASA-CR-133991] p0414 N73-30089
Pressure suit requirements and characteristics for space shuttle personnel performing EVA and IVA activities - Vol. 3
[NASA-CR-133993] p0419 N73-31008

PRESSURE TRANSDUCERS
U PRESSURE SENSORS

PRESSURE WAVES
U ELASTIC WAVES

PRESSURIZED CABINS
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
Theoretical trans-respiratory pressure during rapid decompression. I Model experiment. II - Animal experiments,
p0154 A73-22530

PREVENTION
NT ACCIDENT PREVENTION
NT FIRE PREVENTION

PRIMARY COSMIC RAYS
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds
p0399 A73-42185

PRIMATES
NT CHIMPANZEES
NT HUMAN BEINGS
NT MONKEYS
Prolonged weightlessness for 300 plus days and cardiac performance in primates
[NASA-CR-129512] p0063 N73-12075
Techniques for determining effects of prolonged weightlessness on cardiovascular system of subhuman primates
[NASA-CR-131890] p0252 N73-21980

PRIVATE AIRCRAFT
U GENERAL AVIATION AIRCRAFT

PRIVATE AVIATION
U CIVIL AVIATION
U GENERAL AVIATION AIRCRAFT

PROBABILITY
U PROBABILITY THEORY

PROBABILITY DENSITY FUNCTIONS
NT NORMAL DENSITY FUNCTIONS

PROBABILITY DISTRIBUTION FUNCTIONS
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002

PROBABILITY THEORY
Conjoint-measurement framework for the study of probabilistic information processing.
p0588 A73-12545
Information theory mathematical models applied to different visual function activity phases, covering Shannon and Fisher probability models, Shreider semantic theory and Kolmogorov algorithm
p0060 A73-15784
Probability estimate for visual target detection in terms of luminance threshold and target size and duration
p0093 A73-18242
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161
Biostatistics of genetical processes in human populations
[NASA-CR-131508] p0229 N73-21131
Probabilities models of organizational behavior and human subjective performance
[IZF-1973-3] p0268 N73-23076

PROBLEM SOLVING
Intellectual ability and performance on a non-verbal problem-solving task.
p0044 A73-13553
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241
Solution to problem of endangered living space
[NRC-TT-1636] p0376 N73-29057

PROCEDURES
NT FINITE ELEMENT METHOD

PRODUCTION ENGINEERING
NT PRODUCTION PLANNING
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
Production methods for preventing deterioration of freeze-dried foods
[NASA-CR-128915] p0269 N73-23085

PRODUCTION MANAGEMENT
Manual control model structure for industrial management of man machine systems
p0598 N73-10115

PRODUCTION METHODS
U PRODUCTION ENGINEERING

PRODUCTION PLANNING
Interaction between man and electronic computer in operational planning
p0178 N73-18138

PROFICIENCY
U ABILITIES

PROFICIENCY MEASUREMENT
U HUMAN PERFORMANCE
U PERFORMANCE TESTS

PROGNOSIS
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000
Ischemic heart disease prediction via exercise ECG tests, discussing work load stadardization
p0405 A73-42835

PROGRAMMED INSTRUCTION
Computer-assisted instruction in pilot training and certification.
p0082 A73-16724
Cybernetic application of computers in personnel training
[AD-751145] p0178 N73-18143

PROGRAMS
NT APOLLO PROJECT
NT NASA PROGRAMS
NT SKYLAB PROGRAM
NT TEKTITE PROJECT

PROJECTED AREAS
U PROJECTIVE GEOMETRY

PROJECTIVE DIFFERENTIAL GEOMETRY
U PROJECTIVE GEOMETRY

PROJECTIVE GEOMETRY
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801

PROJECTORS
Servo-controlled moving stimulus generator for single unit studies in vision.
p0246 A73-30401

PROJECTS
NT APOLLO PROJECT
PROPAGATION MODES
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396
PROPELLANT EVAPORATION
Evaporation rates and toxic plume dispersion for defining downwind evacuation areas for populations adjacent to accidental propellent spills on shipping routes
[NASA-TM-X-68188] p0141 N73-16097
PROPELLANT OXIDIZERS
U ROCKET OXIDIZERS
PROPELLANT PROPERTIES
The acute inhalation toxicology of chlorine pentafluoride.
p0282 A73-32173
PROPELLANT TRANSFER
Rocket propellant handling personnel protective clothing, describing head gear, ventilated underwear and airtight external suit
p0115 A73-18949
PROPELLANTS
NT ROCKET PROPELLANTS
PROPELLER SYNCHRONIZERS
U SYNCHRONIZERS
PROPHYLAXIS
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
Special physical training of pilots as a prophylactic measure against obesity
p0277 A73-31172
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Preventive value of early diagnosis of coronary heart disease, noting importance of screening populations for genetic and environmental risk factors
p0404 A73-42828
PROPORTIONAL COUNTERS
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials
p0280 A73-31549
PROPRIOCEPTION
NT AUTOKINESIS
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision
p0092 A73-18164
PROPULSION CALCULATIONS
U MATHEMATICAL MODELS
PROPULSION SYSTEM CONFIGURATIONS
NT DESCENT PROPULSION SYSTEMS
PROPYL COMPOUNDS
Effectiveness of polymer complex of cysteamine and sulfopropyl ester of dextran as an antiradiation drug on irradiated mice
[DRIC-TRANS-2963] p0108 N73-15125
PROSTHETIC DEVICES
NT ARTIFICIAL EARS
The mathematics of coordinated control of prosthetic arms and manipulators.
[ASME PAPER 72-WA/AUT-4] p0061 A73-15884
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
Computerized teleoperator manual control system for remote mechanical hand
p0602 N73-10143
Application of pneumatically controlled prosthetic arm to industrial handling problems
[NASA-TT-F-14628] p0073 N73-13115
Power sources and requirements for human artificial hearts
[COO-2155-4] p0102 N73-14095
Design and development of biomedical prosthetic and electronic devices
[NASA-CR-130022] p0140 N73-16093
Bioelectric control system design for reversible slave mechanism manipulator using single muscle input
p0336 N73-26088
Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] p0439 N73-32013
PROTECTION
NT ACCELERATION PROTECTION
NT ENVIRONMENT PROTECTION
NT EYE PROTECTION
NT RADIATION PROTECTION
NT RADIATION SHIELDING
NT THERMAL PROTECTION
PROTECTIVE CLOTHING
NT HELMETS
NT PRESSURE SUITS
NT SPACE SUITS
Rocket propellant handling personnel protective clothing, describing head gear, ventilated underwear and airtight external suit
p0115 A73-18949
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Protective helmets performance evaluation for design optimization, considering failure analysis from aircraft accident reports
p0284 A73-32655
Bioassay method for thermal protective clothing fabrics evaluation, measuring skin damage with various fabric combinations under exposure to calibrated flame source
p0285 A73-32671
Ventilated wet suit for naval aircrews protection against water exposure in aircraft accidents, describing neoprene foam and nylon liner construction with air ventilation
p0285 A73-32672
Helmets effectiveness evaluation from acceleration and impact tests, discussing test criteria and civilian and military standards
p0286 A73-33132
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
Comparative study of patches for liquid cooled garments.
p0345 A73-37404
Calculation of thermal resistance of air layers in air permeable clothing for reliable design
[AD-746037] p0612 N73-11099
Tests to evaluate heat loss from Navy diver suits in water of 55, 45, and 35 F
[AD-747276] p0613 N73-11103
Environmental control unit for damage control suit system for use during shipboard operations
[AD-749025] p0075 N73-13125
Performance of battery powered electrically heated suit for reconnaissance divers
[AD-749847] p0102 N73-14101
Anthropometry for protective equipment evaluation and human impact acceleration experiments
p0266 N73-23066
Thermal response of protective fabric/human skin system to JP-4 jet fuel fire
[AD-759525] p0337 N73-26095
Personnel life support clothing for protection against environmental hazards
[AD-762428] p0370 N73-27976
Design, development, and fabrication of liquid cooled space suit using ice pack heat sink - Vol. 1
[NASA-CR-114624-VOL-1] p0419 N73-31006
PROTECTIVE COATINGS
Effect of protective barrier creams on toxic alkyl phosphate penetration of pig skin
[BMYG-FBWT-72-15] p0138 N73-16076
PROTECTORS
NT EAR PROTECTORS
PROTEIN METABOLISM
NT LIPID METABOLISM

Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior
p0051 A73-14259
Oxidation effects on rate of C 14-labeled leucine incorporation into rat skeletal muscle protein
p0077 A73-16152
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
Adenonucleotides, NAD+, and NADH in skeletal muscles during intensive work and at rest
p0116 A73-19475
Thermal factor and dehydration influences on protidic and lipidic catabolisms of young men with partial food deprivation in hot climate, discussing metabolic balances
p0125 A73-21248
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
Proteinuria and civil aviation aircrew
p0128 A73-21538
Proteinuria and military aircrew
p0128 A73-21539
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296
Reactivity and certain metabolic indices during prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162
Protein and nucleic acid contents in animal tissues under hypokinesia
p0279 A73-31503
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Protein synthesis in lung - Recovery from exposure to hyperoxia.
p0323 A73-36653
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex
p0384 A73-40750
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Long term hypokinesia effect on protein and nucleic acid content in rat tissue
p0262 N73-23027
Relation between hyperbaric oxygenation and functional activity of differentiated brain with respect ot glutamic acid metabolism
p0368 N73-27960

PROTEINOIDS
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Conjugation of proteinoid microspheres - A model of primordial recombination.
p0091 A73-17952
Book - Molecular evolution and the origin of life.
p0205 A73-27049

PROTEINS
NT ADENINES
NT ADENOSINE DIPHOSPHATE (ADP)
NT ADENOSINE TRIPHOSPHATE (ATP)
NT ADENOSINES
NT ALBUMINS
NT CARBOXYHEMOGLOBIN
NT FIBRIN
NT FIBRINOGEN
NT LIPOPROTEINS
NT MELANIN
NT NUCLEASE
NT NUCLEOTIDES
NT OXIDASE
NT OXYHEMOGLOBIN
NT PEPTIDES
NT PROTEINOIDS
NT PYRIDINE NUCLEOTIDES
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
Body temperature effect on protein conformation stability in healthy and diseased organisms, noting blood plasma albumin fractions
p0057 A73-14822
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Proteins and nucleic acids in prebiotic evolution.
p0090 A73-17937
Model experiments on the prebiological formation of protein.
p0090 A73-17938
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949
Silk fibroin, collagen, glycoproteins, keratin and protamines formation in single evolutionary event by de novo synthesis of DNA
p0116 A73-19219
Action of a serum protein on muscular contraction.
p0125 A73-21200
Protein molecules peptide groups excitation interpretation by quantum theory, noting application to muscle contraction
p0159 A73-23297
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513
X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps
p0308 A73-34893
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
Biodegradation of cellulose fibers and reclamation of single cell protein from refuse through fermentation process
[NASA-CR-130300] p0106 N73-15115
Nutrient protein intake of rats and tolerance to acute hypoxia
p0263 N73-23035

PROTOBIOLOGY
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Protobiochemical developments in terms of extraterrestrial life search and roles of nitriles and urea in prebiological chemical evolution
p0055 A73-14319
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951

PROTON DENSITY (CONCENTRATION)
Proton dosimeter design for distributed body organs.
p0424 A73-43389

PROTON IRRADIATION
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays p0280 A73-31517
Reactivity changes of rats to antiradiation drugs with head and stomach shielded during total irradiation p0213 N73-20072
Pathomorphological changes in internal organs of white rats following 120 MeV proton irradiation and effect of partial shielding on attenuation of damage p0214 N73-20076
PROTON MAGNETIC RESONANCE
Proton magnetic resonance spectra and calorimetry of interactions between ions, inhibitors, and substrates with two ribonucleases [BMVG-FBWT-72-7] p0137 N73-16071
Proton magnetic resonance spectra of ribonuclease A inhibitor complexes, noting effect on catalytic activity [BMVG-FBWT-72-13] p0137 N73-16074
PROTOTYPES
Design and fabrication of prototype particulate regenerative filter with backflush for spacecraft fluid system [NASA-CR-115505] p0268 N73-23084
PRUSSIC ACID
V HYDROCYANIC ACID
PSEUDOMONAS
Ammonifying ability of denitrifying bacteria of species pseudomonas fluorescens [NASA-TT-F-15086] p0412 N73-30068
PSYCHIATRY
Psychiatric and psychometric predictability of test pilot school performance. [AD-754148] p0050 A73-14165
Alpha-delta sleep as replacement for delta sleep in various psychiatric patients with chronic fatigue and depression p0156 A73-22694
Psychopharmacology in treating psychiatric diseases, negative emotions, and nerve stimulation, discussing tranquilizers synthesis and effects p0207 A73-27497
PSYCHOACOUSTICS
Behavioural awakening and subjective reactions to indoor sonic booms. p0059 A73-15592
Effects of aircraft noise on human sleep. p0096 A73-18546
German monograph - The objectivization of the effect of load and stress on an information-reception process of man with the aid of acoustically evoked potentials. p0122 A73-20389
Study of the peripheral auditory adaptation in a psycho-acoustic experiment p0164 A73-23807
Book - Foundations of modern auditory theory. Volume 2. p0243 A73-30276
Psychoacoustic theory of signal detectability based on mathematical input-output mapping model and memory role in human auditory system p0243 A73-30278
Interaural difference thresholds in binaural perception of signals nonexistent in normal acoustic environment, considering beats, memory, learning, and stereophony p0244 A73-30285
Sonic booms and sleep - Affect change as a function of age. p0324 A73-36780
Pure-tone equal-loudness contours for standard tones of different frequencies. p0387 A73-41176
Cognitions and 'placebos' in behavioral research on ambient noise. p0406 A73-42950
Mathematical m 'els for deriving loudness function from physical ·idence without human judgment [NASA-TN-D-72. p0293 N73-24121
Influence of N-typ.. sound wave pressure rise time on guinea pig cochlear and acoustically evoked potentials [ISL-31/72] p0365 N73-27940
PSYCHOLOGICAL EFFECTS
NT OCULOGRAVIC ILLUSIONS
Mathematical description of certain properties of human sensitivity to vibration p0580 A73-10659
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent. p0085 A73-17199
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system p0089 A73-17775
Visual after-images in athletes and coaches as a prestart condition index p0092 A73-18161
Effect of mild acute hypoxia on a decision-making task. p0247 A73-30514
Physical and psychological effects of electromagnetic fields on human and animal central nervous system p0248 A73-30571
A model of psychological annoyance of noise. p0311 A73-35627
Some characteristics of pilot's performance under complicated flight conditions. p0328 A73-36921
Human noise sensitivity, discussing personality effects, Maplin airport planning and population separation into sensitive and imperturbable groups p0430 A73-44770
Effect of temporal uncertainty on human energy expenditure during moderate exercise [AD-743726] p0594 N73-10084
Effects of stress upon psychophysiological responses and performance following sleep deprivation [NASA-CR-128620] p0608 N73-11073
Effect of mood on testing human performance p0069 N73-13075
Recorded observations of crew member activities during Tektite 2 underwater habitability study [NASA-CR-130034] p0140 N73-16094
Analysis of air traffic controller responses under stress conditions to show effects of accuracy, quality, and comprehensiveness of available data p0269 N73-23714
Effect of physical and psychological stress on urinary excretions of adrenal harmones in normal man [NASA-TT-F-15046] p0374 N73-29043
PSYCHOLOGICAL FACTORS
Electromechanical and electronic cockpit displays effectiveness in terms of aircraft control and psychological/physiological factors relating to pilot performance and workload [DGLR PAPER 72-097] p0584 A73-11666
Psychological and medical viewpoint for hijacker handling, discussing air crew training program [AD-757130] p0589 A73-12564
Effects of intermittent and continuous noise on serial search performance. p0044 A73-13560
Identification and adjustment of psychological factors to improve solar patrol observing. p0057 A73-14841
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation. p0058 A73-15218
Reflex act structural components interaction in terms of reflection, creativity and organism-environment relations, noting subjective and objective perception and attitude formation p0061 A73-15798
Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance p0082 A73-16720
Personal life changes and health stresses in contrast to accident proneness as factors in pilot error p0083 A73-16732
Implications of psychoanalytic factors for Air Force operations.

p0196 A73-25340
Effects of prolonged dark adaptation on autokinetic movement.
p0202 A73-26322
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533
Naval aviator training program dropouts identification in terms of physiological, safety, security, social, self-esteem and self-actualization needs
p0247 A73-30513
Psychological factors influencing the relationship between cardiac arrhythmia and mental load.
p0250 A73-30877
Russian book - Engineering psychology in aviation and astronautics.
p0278 A73-31375
Daytime human performance and temperament rhythms as function of individual introversion-extroversion rating
p0286 A73-33157
Nonadjectival rating scales in human response experiments.
p0310 A73-35400
Sudden incapacitation in flight.
p0326 A73-36847
Study of Indian naval aircrew experiences and psychic factors in disorientation.
p0328 A73-36919
Russian book - Psychological problems of activity regulation.
p0393 A73-41884
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
Myocardial infarction susceptibility correlated with psychosocial factors in life change measurement studies
p0405 A73-42833
Psychological stresses and crew compatibility during interplanetary spacecraft flight
[JPRS-57878] p0106 N73-15113
Psychological, physiological, and work hygiene problems in ergonomic technology
[JPRS-58792] p0260 N73-22050
Presentations on psychological models, cybernetics, methodology, and applications to teaching
[TT-70-57147-3] p0413 N73-30076
Psychological conception of operator participation in ergonomic process
p0413 N73-30081

PSYCHOLOGICAL INDEXES
U PSYCHOLOGICAL TESTS

PSYCHOLOGICAL TESTS
Conjoint-measurement framework for the study of probabilistic information processing.
p0588 A73-12545
Psychological test for relative contributions of specific and nonspecific components to intersensory transfer between vision and touch
p0043 A73-13525
Verbal estimates of perceived time of flashing lights interval, relating to lights separation distance
p0044 A73-13552
Intellectual ability and performance on a non-verbal problem-solving task.
p0044 A73-13553
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555
Multidimensional judgments in design of ideal organisms with integral number of resource units allocated among characteristics such as memory, vision, resourcefulness, etc
p0044 A73-13559
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis
p0093 A73-18244
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks
p0095 A73-18470
Central nervous system stresses effects estimation, discussing ocular positioning movements functional significance and psychological processes
p0128 A73-21542
Proposed new test for aptitude screening of air traffic controller applicants.
p0155 A73-22535
Psychic stress detection and measurement, discussing psychological test methods and physiological correlates
p0163 A73-23684
Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization.
p0204 A73-26749
Properties of human visual orientation detectors - A new approach using patterned afterimages.
p0239 A73-29124
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
Intellectual performance during prolonged exposure to noise and mild hypoxia.
p0325 A73-36783
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129
Individual personality variability difficulties in measurement of human psychophysiological reactions to flight stress, emphasizing psychological interview and evaluation methods
p0408 A73-43130
Psychological assessment techniques for determining astronaut attentional flexibility and associate performance
[NASA-CR-128945] p0295 N73-24136
Psychological and personality test results and problems in selection of pilots, air traffic controllers, and technicians from Yemen
p0368 N73-27956
Pilot selection by means of concentration stress test
p0368 N73-27957

PSYCHOLOGY
NT MILITARY PSYCHOLOGY
NT PSYCHOACOUSTICS
NT PSYCHOPHYSICS
Psychopharmacology in treating psychiatric diseases, negative emotions, and nerve stimulation, discussing tranquilizers synthesis and effects
p0207 A73-27497
Book - The psychology of visual perception.
p0310 A73-35474
Annotated bibliography on reaction times in selected human information processing tasks
[AD-745416] p0596 N73-10095
Sports medicine - parameters necessary for maintaining competitive form
p0227 N73-21114
General problems with psychology in scientific and technical creativity
[TT-70-57147-1] p0413 N73-30074
Articles on methodology and historical importance of scientific research in creativity
[TT-70-57147-2] p0413 N73-30075
Problems involved in achieving harmony in life and work of small groups applied to prolonged space flights
p0444 N73-33032

PSYCHOMETRICS
Conjoint-measurement framework for the study of probabilistic information processing. p0588 A73-12545
Psychiatric and psychometric predictability of test pilot school performance. [AD-754148] p0050 A73-14165
German monograph - Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram. p0122 A73-20391
Psychic stress detection and measurement, discussing psychological test methods and physiological correlates p0163 A73-23684
Visual temporal integration for threshold, signal detectability, and reaction time measures. p0235 A73-28097
Psychotechnical selection of flight crews in South Vietnam p0328 A73-36918
Sentography - Dynamic forms of communication of emotion and qualities. p0427 A73-44180
Relating test anxiety and trait-state anxiety [AD-746453] p0066 N73-12104
Use of psychometric tests to account for subjective variations in operations performance relative to target acquisition p0191 N73-19974
Tracking tasks for clinical evaluation of human movement disorders [NASA-CR-132275] p0340 N73-27069
PSYCHOMOTOR PERFORMANCE
NT PSYCHOSOMATICS
Prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance. [DFVLR-SONDDR-268] p0050 A73-14158
Behavioural awakening and subjective reactions to indoor sonic booms. p0059 A73-15592
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion p0080 A73-16696
Effects of noise and response complexity upon vigilance performance. p0086 A73-17523
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia p0124 A73-20985
The interaction between muscle groups in a complex motor act in humans p0125 A73-21320
Simultaneous motor and verbal processing of visual information in a modified Stroop test. p0153 A73-21896
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions. p0155 A73-22537
Self-imposed timeouts under increasing response requirements. p0170 A73-24625
Forced guidance and distribution of practice in sequential information processing. p0201 A73-26319
Target-detection performance as a function of noise intensity and task difficulty. p0201 A73-26320
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age p0276 A73-31158
Work-rest cycle effects on airline pilots performance, considering central nervous system changes measurement techniques p0282 A73-32059
Informative parameters of the psychophysiological state of flight personnel when working with indicators p0305 A73-34237
Psychotechnical selection of flight crews in South Vietnam p0328 A73-36918
Physiological cost in 36- and 48-hour simulated flights. p0355 A73-39101
Effects of single exposures of carbon monoxide on sensory and psychomotor response. p0383 A73-40409
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems. p0392 A73-41735
Cognitions and 'placebos' in behavioral research on ambient noise. p0406 A73-42950
Physiological study of dynamics and evolution of chimpanzee complex behavior, considering motor reactions, group behavior and nerve mechanisms of voluntary acts p0426 A73-43928
Sentography - Dynamic forms of communication of emotion and qualities. p0427 A73-44180
Dynamic changes in psychophysiological motor efficiency of cosmonauts in flight [JPRS-57417] p0602 N73-10144
Standardized performance battery for assessing effects of environmental stressors particularly noise on human performance [NASA-CR-2149] p0148 N73-17102
Choice reaction tasks for discriminating individual skill potentials in information handling situations [AD-752073] p0150 N73-17115
Immersion effects on human physiological motor functions p0180 N73-19081
Combined noise and vibration effects on human mental and psychomotor performance [AMRL-TR-71-115] p0188 N73-19147
Human performance in sequential task training for acquisition of perceptual motor skills under flight stress p0189 N73-19153
Measurements of acceleration stress effects on pilot maneuvering ability and flight control performance [AMRL-TR-72-3] p0189 N73-19154
Human psychomotor and cognitive performance in humid environment [AD-756835] p0296 N73-24142
Human psychomotor performance circadian rhythm variations after transmeridian flight noting time shift effect [DLR-FB-73-52] p0421 N73-31022
Pilot performance under simulated conditions of modified aircraft control dynamics, navigational task complexity, and induced stress [AD-764760] p0441 N73-32025
PSYCHOPHYSICS
NT PSYCHOACOUSTICS
Cat optic tract and geniculate unit responses corresponding to human visual masking effects. p0586 A73-12161
Psychophysical effects of night vision perceptual contrast in terms of central visual receptive field organization p0046 A73-13759
Psychophysical studies of visual image normalization mechanisms in man p0061 A73-15791
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception p0061 A73-15796
Inter-hemispheric transfer of meaningful visual information in normal human subjects. p0119 A73-20123
Human receptive visual field adaptation characteristics for stabilized retinal images by psychophysical probe detection technique p0120 A73-20252
Psychophysical areal summation and stimulus contour and threshold visibility effects on size selective adaptation in human vision for single- and multichannel models p0128 A73-21563
Forced guidance and distribution of practice in sequential information processing. p0201 A73-26319
Estimation of the variability of the latency of responses to brief flashes. p0204 A73-26720

Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Human cone optical density estimation implications of conflicting results for luminosity at bleaching intensities in dichromats related to use of psychophysical data
p0246 A73-30402
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type'
p0362 A73-39797
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli
p0363 A73-39804
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
The psychophysical inquiry into binocular summation.
p0388 A73-41187
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654
Psychobiological factors for predicting monotony tolerance and selecting personnel for isolated duty
[AD-747272] p0071 N73-13098
Psychophysical analysis of RF sound perception in human subjects
[AD-747684] p0099 N73-14076
Psychophysical method of limits to evaluate experimental variables in sensory areas
[AD-749334] p0100 N73-14083
Accuracy of method of constant stimuli for studying sensory capabilities of man in relation to display systems
[AD-753009] p0187 N73-19141

PSYCHOPHYSIOLOGY
Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system
p0089 A73-17775
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
Work movement performance of the astronaut in flight.
p0207 A73-27645
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Memory fixation during sleep, discussing EEG, EOG, EMG and ECG recordings for differences between light and paradoxal sleep
p0280 A73-31749
A device for the continuous measurement of subjective changes
p0285 A73-33090
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli
p0322 A73-36577
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196
The problem of spiritual requirements and the theory of human higher nervous activity
p0362 A73-39796
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893
Individual personality variability difficulties in measurement of human psychophysiological reactions to flight stress, emphasizing psychological interview and evaluation methods
p0408 A73-43130
Dynamic changes in psychophysiological motor efficiency of cosmonauts in flight
[JPRS-57417] p0602 N73-10144
Psycho-visual problems associated with monocular, bi-ocular, and binocular visual systems
[AD-749450] p0101 N73-14085
Simulated lunar magnetic environment effects on humans, using scotopic critical flicker frequency measurements to indicate psychophysiological stress
[AD-748193] p0101 N73-14088
Research on laser irradiation effects, sensory psychophysiology, and human blood processing for military medicine
[AD-749440] p0108 N73-15130
Choice reaction tasks for discriminating individual skill potentials in information handling situations
[AD-752073] p0150 N73-17115
Human stress expenditures in operational airlift mission flights
p0189 N73-19151
Proceedings of symposium on color vision, color perception, visual acuity, and psychophysiology
[AD-754328] p0221 N73-20136
Human psychomotor and cognitive performance in humid environment
[AD-756835] p0296 N73-24142
Psychophysiological aspects in flight personnel visual perception of image indicator
p0373 N73-29035

PSYCHOSES
Role of associations in the formation of evoked potentials from the human cerebral cortex
p0362 A73-39798

PSYCHOSOMATICS
Clinical psychology diagnostic methods in military aviation medicine, considering neurotic symptoms and psychsomatic disorders in flight fitness examinations
p0408 A73-43129
Drug therapy effects on flying effectiveness and psychosomatic fitness of flying personnel
p0226 N73-21103

PSYCHOTHERAPY
Mental health services for emotional counselling in NASA facilities to insure maximum human performance
p0144 N73-17062

PSYCHROPHILES
Psychrophilic organisms in soil samples of areas for Viking spacecraft assembly
[REPT-2] p0333 N73-26063

PUBLIC HEALTH
Application of remote sensing techniques to public health

[NASA-CR-129822] p0099 N73-14069
PULMONARY CIRCULATION
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung. p0577 A73-10167
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application p0586 A73-12159
Gas-blood CO2 equilibration in dog lungs during rebreathing. p0048 A73-14115
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart. p0053 A73-14291
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man. p0094 A73-18335
Time course of pulmonary vascular response to hypoxia in dogs. p0120 A73-20168
Sinus venosus atrial septal defect - Analysis of fifty cases. p0121 A73-20368
Pathogenesis of some respiration and circulation reactions to barometric pressure gradients p0123 A73-20980
Significance of the Bohr and Haldane effects in the pulmonary capillary. p0129 A73-21614
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest. p0129 A73-21615
Changes in the vascular tone of certain organs during experimental embolism of pulmonary circulation p0154 A73-22366
Red cell flexibility and pressure-flow relations in isolated lungs. p0158 A73-22927
Distribution of systemic blood flow during cardiopulmonary bypass. p0158 A73-22930
Effect of physical exercises on the lung rheogram p0169 A73-24524
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction. p0169 A73-24565
Comparison of blood and alveolar gas composition during rebreathing in the dog lung. p0201 A73-26218
Book on echocardiography covering examination of mitral, aortic, tricuspid and pulmonic valves, ventricles, atrium, pericardial effusion, coronary artery disease and tumors p0245 A73-30358
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs p0250 A73-30849
Effects of tilting on pulmonary capillary blood flow in normal man. p0361 A73-39786
Oxygen delivery and oxygen return to the lungs at onset of exercise in man. p0361 A73-39788
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood p0382 A73-40281
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation p0382 A73-40282
Circulatory reflexes from mechanoreceptors in the cardio-aortic area. p0384 A73-40637
Morphometry of the human pulmonary arterial tree. p0384 A73-40639
Cardiopulmonary responses of male and female swine to simulated high altitude. p0432 A73-45058
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli. p0433 A73-45064
Sensory receptors irritation and cardiopulmonary toxicity from fluorocarbon propellants
[AD-751426] p0140 N73-16089

PULMONARY FUNCTIONS
Insensitivity of the alveolar septum to local hypoxia. p0575 A73-10134
Cardiorespiratory responses to exercise in air and underwater. p0576 A73-10161
Arterial oxygen increase by high-carbohydrate diet at altitude. p0576 A73-10164
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung. p0577 A73-10167
Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data p0577 A73-10169
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data p0577 A73-10171
A system for continuous measurement of gas exchange and respiratory functions. p0577 A73-10172
High altitude adaptation in mountain inhabitants of Tian Shan and Pamir, discussing effects on hemodynamic and pulmonary functions p0584 A73-11922
Relationship of anginal symptoms to lung mechanics during myocardial ischemia. p0589 A73-12820
Normal pulmonary pressure-flow relationship during exercise in the sitting position. p0042 A73-13124
Indexes of ventilation distribution before/after airway occlusion in dogs, indicating collateral channel inspired gas distribution reduction p0048 A73-14113
Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways p0048 A73-14114
Finite element displacement analysis of a lung. p0056 A73-14661
A new method for simultaneous measurement of total respiratory resistance and compliance. p0084 A73-16799
Regional lung volumes with positive pressure inflation in erect humans. p0094 A73-18334
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man. p0094 A73-18335
Predictions of the dynamic response of the lung. p0116 A73-19477
Respiration mechanics during weightlessness simulation in an immersion medium p0124 A73-20986
Effects of lung volume and disease on the lung nitrogen decay curve. p0126 A73-21501
Cardiovascular changes in middle-aged men during two years of training. p0127 A73-21504
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man. p0127 A73-21505
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms. p0129 A73-21612
Pulmonary respiration and acid-base state in hibernating marmots and hamsters. p0129 A73-21613
Theoretical trans-respiratory pressure during rapid decompression. I Model experiment. II - Animal experiments. p0154 A73-22530
Influence of developmental adaptation on aerobic capacity at high altitude. p0158 A73-22928
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects. p0158 A73-22929
Single breath nitrogen washout method for measurement of functional residual capacity. p0195 A73-25332
Effect of acute exposure to CO2 on lung mechanics in normal man.

p0200 A73-26216
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217
Method of PaCO2 determination in men with functional disorders of external respiration
p0239 A73-29075
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463
Postural effects on respiration, pulmonary ventilation, oxygen uptake and inhalation and exhalation volumes during asana /yoga gymnastics/ exercises executed by athletes
p0322 A73-36573
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930
Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence
p0343 A73-37197
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620
Control of the duration of expiration.
p0391 A73-41635
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
External airway resistance effects on ventilation and carbon dioxide response during human steady state exercise
p0400 A73-42417
Gas transport in the human lung.
p0400 A73-42421
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
Respiratory work minimization during exercise, using respiratory frequency, functional residual capacity and air flow pattern effects as controlled variables
p0433 A73-45066
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067
Analysis of arterial hypoxemia caused by pulmonary malfunctions and regulation of oxygen during exercise and rest
[AD-746979] p0071 N73-13092
Deep diving pulmonary functions of man using different breathing gas densities
[AD-749028] p0100 N73-14082
Human oxygen metabolism and pulmonary functions during hypodynamic water immersion
p0181 N73-19082
Human pulmonary volume decrease during long term bed rest
p0256 N73-22016
Centrineurogenic etiology for pulmonary changes of high altitude pulmonary edema
[AD-756940] p0294 N73-24127

PULMONARY LESIONS
Thoracic X ray photography technique for tubercular lesion detection in flight personnel, comparing to standard radiography and radioscopy
p0586 A73-12155
Cat and rat lung damage due to hyperbaric oxygen exposure and head injury, discussing alveolar surfactants, sympathetic stimulation and monkey injuries
[AD-759298] p0238 A73-28507
Development and reversibility of pulmonary oxygen poisoning in the rat.
p0247 A73-30516
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319

PULSATING FLOW
U UNSTEADY FLOW

PULSE AMPLITUDE
Amplitude discriminator with variable effective range design for use with/without digital computer in neuron pulsed activity analysis
p0168 A73-24516
Alpha wave peak amplitude dependence on blocking pattern after stimulation during habituation-pseudoconditioning, conditioning and extinction
p0242 A73-29992

PULSE CODE MODULATION
NT DELTA MODULATION

PULSE DURATION
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500

PULSE DURATION MODULATION
Pulse duration-frequency modulation multichannel biotelemetry system for physiological parameter assessment during exercise, noting circuit diagrams of radio transmitter and receiver
p0052 A73-14281
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system
p0162 A73-23381

PULSE FREQUENCY MODULATION TELEMETRY
Multichannel PDM-FM biomedical radio telemetry system for ECG, respiratory rate and oxygen consumption during exercise, considering transmitter and receiver design
p0052 A73-14278
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305

PULSE GENERATORS
Three channel transistorized pulse generator for electric stimuli used in electrophysiological studies
p0084 A73-16739

PULSE HEIGHT
U PULSE AMPLITUDE

PULSE MODULATION
NT DELTA MODULATION
NT PULSE DURATION MODULATION
NT PULSE FREQUENCY MODULATION TELEMETRY
Motor function modeling of human arm by manipulator using myoelectric control pulses
p0336 N73-26091

PULSE RATE
Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208

PULSE TIME MODULATION
NT PULSE DURATION MODULATION

PULSE WIDTH
U PULSE DURATION
PULSE WIDTH MODULATION
U PULSE DURATION MODULATION
PULSED LASERS
Retinal damage thresholds for multiple pulse lasers.
[AD-758530] p0196 A73-25341
PULSES
NT ELECTRIC PULSES
NT PRESSURE PULSES
PUMPS
NT DIFFUSION PUMPS
PUPIL SIZE
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395
Visual acuity dependence on background brightness, object contrast, pupil diameter and visual time lag
p0306 A73-34639
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
PUPILLOMETRY
Pupil enlargement in relation to operator stress during adaptive critical tracking task
[AD-749075] p0100 N73-14081
Pupillometry using advanced design oculometer
[AD-752121] p0150 N73-17116
PUPILS
Photoelectric servo simulator for pupil, using Wheatstone bridge with CdS light dependent resistor
p0246 A73-30399
PURIFICATION
NT AIR PURIFICATION
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975
PURIFIERS
U PURIFICATION
PURINES
NT ADENINES
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose
p0396 A73-42166
PURSUIT TRACKING
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
Heuristic response strategies and operator performance errors as function of practice in cross coupled pursuit tracking control tasks
p0117 A73-19548
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093
Input adaptive behavior model of human operator in pursuit tracking task
p0597 N73-10108
PWM (MODULATION)
U PULSE DURATION MODULATION
PYRIDINE NUCLEOTIDES
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique
p0153 A73-21871
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
PYRIDINES
Protective effects of pyridinium salts against alkyl phosphate poisoning including influence of chemical and aging
[BMVG-FBWT-72-8] p0137 N73-16072
Pharmacologic investigations of antagonistic effects of pyridines on isolated guinea pig ileum
[BMVG-FBWT-72-14] p0138 N73-16075
PYRIDOXINE
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
Inhibiting and activating effect of mono- and bi-quaternary pyridioxide reactivators on bovine erythrocyte cell membrane
[BMVG-FBWT-72-9] p0187 N73-19138
PYRIMIDINES
NT MITOCHONDRIA
PYROLYSIS
Toxicity of pyrolysis products from chlorotrifluroethylene-ethylene copolymer Halar resin
[AD-751436] p0138 N73-16080
PYROMETRY
U TEMPERATURE MEASUREMENT
PYRROLES
NT INDOLES
NT TRYPTOPHAN
Abiogenic formation of porphin, chlorin and bacteriochlorin.
p0090 A73-17934
Erythrocyte preservation in blood transfusion practice by cryogenic freezing with polyvinylpyrrolidone
[NASA-TT-F-14590] p0069 N73-13076
PYRUVATES
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500

Q

QUALITY CONTROL
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on speed
p0423 A73-43212
Development of quality monitoring system for water recovery cycle in weightlessness environment
[NASA-CR-112267] p0222 N73-20144
QUANTITATIVE ANALYSIS
Quantitative evaluation of superficial organic contaminants, soluble in halogenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis
p0096 A73-18547
Quantitative analysis of irreversible portion of radiation damage combined with gamma rays and acceleration
p0214 N73-20082
Accuracy of various tracer methods for measuring body water compartments during bed rest
[NASA-TR-R-406] p0295 N73-24133
QUANTUM THEORY
Protein molecules peptide groups excitation interpretation by quantum theory, noting application to muscle contraction
p0159 A73-23297
QUASILINEARITY
U NONLINEARITY

R

RABBITS
Fever generation in rabbits by intravenous injection of table salt
[NASA-TT-F-14677] p0136 N73-16063
Hypothermy effects on drug actions in physiological rabbit functions
p0212 N73-20064
Dynamics of some characteristics of induced potential of optical region in cerebral cortex in rabbits with increasing hypoxia
p0217 N73-20103
High altitude acclimatization effects on mice and rabbit tolerances to hypoxia, acceleration, and high temperature
[NASA-TT-F-14861] p0219 N73-20123
Effects of gastrointestinal pressure on rabbit eye nystagmus during barotrauma
p0253 N73-21983
Gastrointestinal proprioceptor effects on high altitude rabbit ocular reflexes
p0253 N73-21984
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anesthetized rabbits
p0449 N73-33069

RACE FACTORS
Unacclimatized male Caucasians lower critical temperature determination for subsequent investigation of ethnic variability in acute cold exposure responses
p0577 A73-10166
RADAR
NT SIDE-LOOKING RADAR
RADAR DIRECTION FINDERS
U RADIO DIRECTION FINDERS
RADAR DISPLAYS
U RADARSCOPES
RADAR EQUIPMENT
NT RADARSCOPES
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
RADAR IMAGERY
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241
RADAR MAPS
NT RADAR IMAGERY
RADAR TARGETS
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
RADARSCOPES
Human factors evaluation of labelled radar displays.
p0049 A73-14155
RADIANCE
Photopic luminous efficiency measured by critical flicker frequency method, noting dependence on intermittence frequency of light stimulus or overall radiance level
[AD-754344]
p0585 A73-12076
RADIANT FLUX DENSITY
NT ILLUMINANCE
NT IRRADIANCE
NT LUMINANCE
NT LUMINOUS INTENSITY
NT RADIANCE
Radiation regime of forest vegetation under plant cover and open areas under various weather conditions
p0378 N73-29329
RADIANT HEATING
Thermal effects of microwave and radio frequency radiation on biological systems
[MBL-1971-7-PT-1]
p0264 N73-23048
RADIANT INTENSITY
U RADIANT FLUX DENSITY
RADIATION ABSORPTION
NT ATMOSPHERIC ATTENUATION
NT ELECTROMAGNETIC ABSORPTION
NT ULTRAVIOLET ABSORPTION
Effectiveness of combined chemical protectors against mixed gamma-neutron radiation with neutron contributions to absorbed dose
p0212 N73-20068
Vacuum/tissue interface effect on biological energy absorption from charged particle track
p0372 N73-29028
RADIATION CONTROL
U RADIATION PROTECTION
RADIATION COUNTERS
NT PROPORTIONAL COUNTERS
NT SCINTILLATION COUNTERS
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
RADIATION DAMAGE
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873
Retinal damage thresholds for multiple pulse lasers.
[AD-758530]
p0196 A73-25341
An experimental basis for carcinogenic effects of ultraviolet radiation.
p0203 A73-26485
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787
Frequency of heavy ions in space and their biologically important characteristics.
p0398 A73-42178
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments
p0398 A73-42183
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095
Argon laser radiation damage to retina of diabetic and nondiabetic patients
[AD-747058]
p0071 N73-13099
Internally deposited radioisotope effects on cell populations in mammals
[NYO-3970-29]
p0099 N73-14074
Effects of ionizing radiation and space flight conditions on microorganisms, plants, animals, enzymes, and immunological preparations
p0173 N73-18103
Quantitative analysis of irreversible portion of radiation damage combined with gamma rays and acceleration
p0214 N73-20082
Free amino acid excretion in urine as test for early diagnosis of radiation damage in humans
p0215 N73-20092
Machine assisted human chromosome karyotyping and aberration for radiation damage
[ANL-7960-PT-2]
p0334 N73-26068
RADIATION DETECTORS
NT DOSIMETERS
Whole body counter efficiency calculations using NaI(Tl) detector for measuring point sources
[KFKI-72-30]
p0067 N73-12114
RADIATION DISTRIBUTION
NT ANTENNA RADIATION PATTERNS
NT DIFFRACTION PATTERNS
Influence of light conditions and understory tree death on organic matter loss balance in oak underwood
p0378 N73-29331
RADIATION DOSAGE
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Radiation protection at the work site: Scientific, technical and organizational aspects; Annual Scientific Conference, 6th, Karlsruhe, West Germany, May 17-19, 1972, Reports
p0195 A73-25310
Geomagnetic latitude variation of cosmic radiation rates measured onboard Concorde SST prototypes, investigating solar flares
p0204 A73-26588
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Proton dosimeter design for distributed body organs.
p0424 A73-43389
Megarad plastic film dosimeter.
p0427 A73-44212

Dosimetric determination of absorbed gamma and neutron radiation on human phantom
[AD-743005] p0593 N73-10077
Method for calculating aircrew radiation dosage near atmospheric nuclear weapon detonation
[AD-745084] p0593 N73-10079
Cosmic radiation dosage measurements on Apollo astronauts by Lexan dosimetry
[AD-745188] p0596 N73-10101
Methods for predicting initial radiation exposure at ground surface resulting from nuclear explosions
[AD-745906] p0610 N73-11084
Dosimetric analyses for Biosatellite 2 yeast and artemia radiation exposure experiment
[NASA-CR-127142] p0069 N73-13082
Energy comparisons for lethal doses of gamma radiation and visible light with energy of basal cell metabolism
[AD-746750] p0072 N73-13102
Internally deposited radioisotope effects on cell populations in mammals
[NYO-3970-29] p0099 N73-14074
Occupational hazards and adverse biological effects of ultraviolet radiation
p0148 N73-17094
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-130538] p0150 N73-17114
Ionization, thermoluminescence, and nuclear photographic emulsion dosimetry for monitoring radiation loads in spacecrews during manned space flight
p0173 N73-18100
Radiobiological effects of cosmic radiation in animals and standardization of permissible radiation levels for spacecrews
p0173 N73-18102
Monte Carlo radiation transport computer codes for calculating dose distributions and cell survival probabilities
[NASA-CR-130965] p0176 N73-18127
Exposure to gamma rays from Co-60 and transverse loads and effectiveness of cysteamine and AET protection
p0215 N73-20086
Microdosimetric pattern of galactic heavy primaries dissipation in tissues during space flight
[NASA-CR-131467] p0230 N73-21132
Neutron activation analysis of cosmic radiation doses in Apollo 14, 15, and 16 astronauts
[NASA-CR-131984] p0267 N73-23070
Radioactivity urinalysis for calculating postflight astronaut cosmic radiation exposure
[NASA-CR-133378] p0365 N73-27939
Vacuum/tissue interface effect on biological energy absorption from charged particle track
p0372 N73-29028
U.S., Soviet, and Polish standards for radiation levels for humans
p0415 N73-30905

RADIATION EFFECTS
NT RADIATION DAMAGE
NT RADIATION INJURIES
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354
Russian monograph on radioactive isotopes effects on organisms covering metabolism, elimination, acceleration methods, pathogenesis and treatment of damage, toxicity, biological action, etc
p0590 A73-12865
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
Physiological effects of microwave electromagnetic fields on human and animal organisms, considering etiology, diagnostics and prophylaxis
p0093 A73-18256
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
Effects of chronic irradiation of dogs with Co-60 gamma rays on the level of auto-antibodies
p0208 A73-27706
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
Overview of the biological effects of electromagnetic radiation.
p0240 A73-29211
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169
The combined influence of microwave radiation and an adverse climate on the organism
p0277 A73-31170
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
Sterilization technology in the United States space program.
p0288 A73-33697
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation
p0305 A73-34230
Russian book - Primary and initial processes of the biological action of radiation.
p0312 A73-35896
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet.
p0355 A73-39103
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp.
p0361 A73-39791
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose
p0396 A73-42166

Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
Heavy ion irradiation effects on bacteria mutations in balloon flight and accelerator experiments, comparing with cosmic rays
p0399 A73-42184
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds
p0399 A73-42185
Reactions of living organisms to the action of electromagnetic waves in the millimeter range
p0426 A73-44094
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
Compilation of data concerning effects of infrared radiation on eye
[NASA-CR-128407] p0591 N73-10064
Neutron and gamma induced transient incapacitation in conditioned Macaca mulatta
[AD-742076] p0594 N73-10080
Human and animal studies on both ionizing and nonionizing radiations
[PB-210613] p0596 N73-10099
Effects of whole body exposure to external radiations, using animal studies applied to man
[CONF-720108-2] p0066 N73-12102
Articles and abstracts of articles concerning radiobiology
[AEC-TR-7306] p0066 N73-12103
Energy comparisons for lethal doses of gamma radiation and visible light with energy of basal cell metabolism
[AD-746750] p0072 N73-13102
Observation of circulating lymphocytoid cell in monkey after exposure to radio waves
[AD-749583] p0108 N73-15128
Research on laser irradiation effects, sensory psychophysiology, and human blood processing for military medicine
[AD-749440] p0108 N73-15130
Bibliography on radio frequency and microwave radiation effects in biological systems
[AD-750271] p0108 N73-15131
Radiation effects on human visual and vestibular analyzer functions
[AD-750499] p0109 N73-15132
Oxygen content and hydrogen ion concentration in monkey blood after incapacitating ionizing radiation dosage
[AD-750681] p0109 N73-15134
Abstracts on radiation and health physics
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069
Vestibular analyzer functions in dogs after prolonged ionizing irradiation
p0181 N73-19088
Ultraviolet radiation, X rays, freezing, and thawing effects on ribonuclease
p0185 N73-19120
Radioresistance recovery rate with combined exposure to ionizing radiation and dynamic factors (vibration and acceleration)
p0214 N73-20080
Effect of cysteamine combined with adrenalin and phenamine on reparative processes following irradiation and overload
p0214 N73-20081
Clinical hematological indices for evaluating vibration effect (70 Hz, 0.4 cm amplitude) on radiation reaction in dogs
p0215 N73-20084
Morphological changes in liver of dogs subjected to chronic gamma radiation
p0217 N73-20101
Proliferative activity of bone marrow in dogs exposed to three-year chronic gamma irradiation
p0217 N73-20102
Operant behavior of rhesus monkeys in presence of extremely low frequency, low intensity magnetic and electric fields
[AD-754058] p0230 N73-21134
Atmospheric effects on laser propagation and impact on eye safety
[AD-755405] p0259 N73-22044
Microwave radiation effects on rat tissues and length of survival
p0415 N73-30904

RADIATION EXPOSURE
U RADIATION DOSAGE
RADIATION FIELDS
U RADIATION DISTRIBUTION
RADIATION HAZARDS
Russian book on radiation genetics of microorganisms covering lethal and mutagenic action of radiation on fungi, microscopic algae, bacteria and viruses
p0060 A73-15701
Radiation problems of supersonic flight - The operators' viewpoint.
p0080 A73-16624
Radiation protection at the work site: Scientific, technical and organizational aspects; Annual Scientific Conference, 6th, Karlsruhe, West Germany, May 17-19, 1972, Reports
p0195 A73-25310
Biophysical hazards of microwave radiation.
p0285 A73-32723
Microwave radiation hazards around large microwave antenna.
p0343 A73-37274
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation
p0356 A73-39205
Frequency of heavy ions in space and their biologically important characteristics.
p0398 A73-42178
Theoretical study of biological hazards from exposure to ELF electrical fields and potentials
[AD-743480] p0595 N73-10093
Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097
Test evaluation of laser protective visors for flight crews
[AD-751470] p0142 N73-16102
Medical examinations and protection procedures for NASA employees working in radiologically controlled areas
p0143 N73-17050
Occupational hazards and adverse biological effects of ultraviolet radiation
p0148 N73-17094
Physical and experimental data obtained by artificial satellites for estimating extraterrestrial radiation hazard in manned space flight
[NASA-TT-F-724] p0173 N73-18098
Effects of ionizing radiation and space flight conditions on microorganisms, plants, animals, enzymes, and immunological preparations
p0173 N73-18103
Thermal effects of microwave and radio frequency radiation on biological systems
[MBL-1971-7-PT-1] p0264 N73-23048
Radiation hazards of gallium arsenide diode array lasers
[AD-762277] p0370 N73-27975

RADIATION HEATING
U RADIANT HEATING
RADIATION INDICATORS
U DOSIMETERS
U INDICATING INSTRUMENTS
RADIATION INJURIES
Russian book - Information macromolecules during radiation injury to cells.
p0060 A73-15707
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
Deficits in visual function associated with laser irradiation.
p0169 A73-24563

Retinal damage from repeated subthreshold exposures using a ruby laser photocoagulator. p0238 A73-28508
Book - Pathological effects of radio waves. p0348 A73-37774
Argon-ion laser used to determine ocular effects of repetitive laser pulses on rhesus monkeys [AD-746795] p0071 N73-13096
Literature review of experimental studies to assess relationship of exposure to microwaves and subsequent development of cataracts [UR-3490-103] p0107 N73-15123
Spectral deficits in visual acuity due to laser irradiation [AD-750394] p0114 N73-15173
Chorioretinal burn hazards of high intensity radiation sources in industry p0145 N73-17071
Retinal damage in monkeys exposed to near infrared gallium arsenide laser pulses [AD-753419] p0221 N73-20135
Radiation effects on human chromosomal aberrations in peripheral blood lymphocytes p0263 N73-23041
Radiation hazards of gallium arsenide diode array lasers [AD-762277] p0370 N73-27975
Microscopic morphological changes in dog cardiac muscle after chronic gamma irradiation p0372 N73-29027

RADIATION INTENSITY
U RADIANT FLUX DENSITY

RADIATION MEASUREMENT
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method. p0054 A73-14304
Delta ray particle track structure theory for radiation dosimetry and biological cell response to heavy ions, fast neutrons, stopped pions and mixed radiation fields p0196 A73-25423
Exposure distributions for air travelers and radiation workers at 0.54 millirem/year [AD-743482] p0594 N73-10083
Cosmic radiation dosage measurements on Apollo astronauts by Lexan dosimetry [AD-745188] p0596 N73-10101
Measurements of radiation characteristics in multistoreyed overmature oak grove p0378 N73-29332

RADIATION MEASURING INSTRUMENTS
NT ACTINOMETERS
NT DOSIMETERS
NT INFRARED DETECTORS
NT PROPORTIONAL COUNTERS
NT RADIATION COUNTERS
NT RADIATION DETECTORS
NT SCINTILLATION COUNTERS
NT SPECTROPHOTOMETERS
Computer program for measuring specific radioisotopes contained in human body [AD-745578] p0593 N73-10078

RADIATION MEDICINE
NT RADIOBIOLOGY
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium p0583 A73-11586
Russian book on auto-antibodies of X ray irradiated animal and human blood and organisms covering cell formation, isolation, preparations, sickness treatment and auto-immune reactions p0060 A73-15711

RADIATION METERS
U RADIATION MEASURING INSTRUMENTS

RADIATION PRESSURE
NT ILLUMINANCE
NT LUMINANCE
NT LUMINOUS INTENSITY

RADIATION PROTECTION
NT RADIATION SHIELDING
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium p0583 A73-11586
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat. p0587 A73-12187
Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation p0047 A73-13824
Antiradial properties of DNA and of its denaturation products p0098 A73-18875
Radiation protection at the work site: Scientific, technical and organizational aspects; Annual Scientific Conference, 6th, Karlsruhe, West Germany, May 17-19, 1972, Reports p0195 A73-25310
New norms and standardization trends for dosimetry and protection against radiation p0195 A73-25311
Personnel radiation protection technology and criteria review, discussing dosimeter specifications and automatic data processing p0195 A73-25314
Book - An introduction to radiation protection. p0205 A73-27048
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis p0207 A73-27499
Protection of humans from radiation injuries by chemical means [NRC-TT-1609] p0106 N73-15112
Effectiveness of pharmacochemical protective substances on irradiated mice as neutron component increases [DRIC-TRANS-2961] p0108 N73-15124
Medical examinations and protection procedures for NASA employees working in radiologically controlled areas p0143 N73-17050
IR laser radiation eye protector [AD-753080] p0178 N73-18142
Hand book on ionizing radiation protection policies at Kennedy Space Center [NASA-TM-X-69410] p0186 N73-19133
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals [NASA-TT-F-721] p0211 N73-20054
Classification of radioprotectors for radiation sickness prevention effects p0212 N73-20065
Effectiveness of combined chemical protectors against mixed gamma-neutron radiation with neutron contributions to absorbed dose p0212 N73-20068
Elimination of toxic cysteamine in organisms and method for prolonging its radioprotective effect p0213 N73-20069
Contamination radiation safety during space flight, and safety problems at launch [JPRS-58781] p0232 N73-21149

RADIATION RESISTANCE
U RADIATION TOLERANCE

RADIATION SHIELDING
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure p0087 A73-17685
Radiation doses during a prolonged orbital space flight about the earth p0242 A73-29867
Localized shielding effects on antitissue antibody mobilization in irradiated rats p0064 N73-12086
Influence of head and stomach shielding on radiation sickness and animal survival from gamma-neutron irradiation p0213 N73-20071
Reactivity changes of rats to antiradiation drugs with head and stomach shielded during total irradiation p0213 N73-20072
Influence of shielding head and anterior stomach on course of radiation sickness in dogs subjected to total lethal gamma irradiation p0213 N73-20073
Stomach shielding effects on chromosomal aberration frequency in guinea pig and rat marrow cells after gamma radiation at doses of 50 to 200 r p0213 N73-20074

GAST and GALT aminotransferases activity of dog blood serum following total exposure to gamma rays with stomach or head shielded
p0213 N73-20075
Pathomorphological changes in internal organs of white rats following 120 MeV proton irradiation and effect of partial shielding on attenuation of damage
p0214 N73-20076
Characteristics of pathomorphological changes in rat internal organs subjected to gamma-neutron irradiation with head and stomach shielded
p0214 N73-20077

RADIATION SICKNESS
Classification of radioprotectors for radiation sickness prevention effects
p0212 N73-20065
Influence of head and stomach shielding on radiation sickness and animal survival from gamma-neutron irradiation
p0213 N73-20071
Influence of shielding head and anterior stomach on course of radiation sickness in dogs subjected to total lethal gamma irradiation
p0213 N73-20073
Influence of cysteamine hydrochlorine and vitamin B and C prophylaxis on radiation sickness in humans
p0214 N73-20078
Comparison of peripheral blood of acclimatized and nonacclimatized irradiated rats under prolonged conditions of reduced barometric pressure
p0215 N73-20088
Combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090

RADIATION SPECTRA
NT ABSORPTION SPECTRA
NT ELECTROMAGNETIC SPECTRA
NT EMISSION SPECTRA
Frequency of heavy ions in space and their biologically important characteristics.
p0398 A73-42178
Effects of radiation and heat balance of active surface on life processes of plants with emphasis on productivity of cotton
p0378 N73-29323

RADIATION THERAPY
Rotating target providing high yield neutrons by He-4 reaction for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067
Safe handling system for iridium isotopes used in radiation therapy
p0231 N73-21143

RADIATION TOLERANCE
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria.
p0117 A73-19483
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Retinal damage from repeated subthreshold exposures using a ruby laser photocoagulator.
p0238 A73-28508
Biophysical hazards of microwave radiation.
p0285 A73-32723
Biological indicators and the effectiveness of sterilization procedures.
p0288 A73-33692
Book - Pathological effects of radio waves.
p0348 A73-37774
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments
p0397 A73-42172
Neutron and gamma induced transient incapacitation in conditioned Macaca mulatta
[AD-742076] p0594 N73-10080
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Increased toxicity of sympathomimetic amine stimulants on spinal reflexes in irradiated frogs
p0212 N73-20063
Mortality rate in antiradiation drug protected mice subjected to gamma radiation overloads
p0214 N73-20079
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Ultraviolet extraterrestrial radiation tolerances of Bacillus subtilis spores and Escherichia coli bacteriophages
p0291 N73-24107
Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores
p0291 N73-24108
Space flight ultraviolet irradiation effects on Bacillus thuringiensis toxin production capability
p0291 N73-24109
Phenotype numbers and survival rates of fungi exposed to space environment during Apollo 16 flight
p0292 N73-24110

RADIATIVE HEAT TRANSFER
Radiation heat transmission from human underlying and surface skin effect on epidermal temperature gradient
p0428 A73-44217
Thermal resistance of clothing noting radiative body heat transfer, air layers, and clothing thickness
[DRIC-TRANS-2920] p0067 N73-12117

RADIATIVE TRANSFER
NT RADIATIVE HEAT TRANSFER
Biometric and radiant transfer characteristics of forest vegetation
p0378 N73-29328

RADIO ANTENNAS
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen
[AHS PREPRINT 720] p0309 A73-35061

RADIO COMMUNICATION
NT PULSE FREQUENCY MODULATION TELEMETRY
NT RADIO TELEMETRY
NT TELEPHONY

RADIO DIRECTION FINDERS
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen
[AHS PREPRINT 720] p0309 A73-35061

RADIO ENERGY
U RADIANT FLUX DENSITY
U RADIO WAVES

RADIO EQUIPMENT
NT RADIO ANTENNAS
NT RADIO TRANSMITTERS

RADIO FREQUENCIES
NT LOW FREQUENCIES
NT LOW FREQUENCY BANDS
NT MICROWAVE FREQUENCIES
Psychophysical analysis of RF sound perception in human subjects
[AD-747684] p0099 N73-14076

RADIO FREQUENCY HEATING
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824

RADIO FREQUENCY INTERFERENCE
RF fields as new ecological factor in environment pollution, considering radiation interaction with biological systems and increased use of electromagnetic spectrum
p0392 A73-41787

RADIO FREQUENCY RADIATION
U RADIO WAVES

RADIO INTERFERENCE
U RADIO FREQUENCY INTERFERENCE

RADIO SIGNAL ABSORPTION
U ELECTROMAGNETIC ABSORPTION

RADIO TELEMETRY
NT PULSE FREQUENCY MODULATION TELEMETRY
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280

Blood flow and pressure and ECG data acquisition and transmission via radio telemetry system with electromagnetic flowmeter
p0052 A73-14283
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature
p0053 A73-14288
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart.
p0053 A73-14291
Voltage controlled subcarrier oscillator design and performance for FM/FM multiplex telemetry system for ECG recording during exercise
p0053 A73-14293
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208

RADIO TRACKING
NT WILDLIFE RADIOLOCATION
Satellite system for tracking of wildlife and birds in natural environment
[NASA-CR-130301] p0104 N73-15090

RADIO TRANSMITTERS
Miniature single channel narrow-band differential pulse width modulation-FM crystal controlled transmitter for biomedical telemetry system
p0162 A73-23381
Microwave radiation hazards around large microwave antenna.
p0343 A73-37274

RADIO WAVES
NT MICROWAVES
NT MILLIMETER WAVES
NT SUBMILLIMETER WAVES
Book - Pathological effects of radio waves.
p0348 A73-37774
Observation of circulating lymphocytoid cell in monkey after exposure to radio waves
[AD-749583] p0108 N73-15128

RADIOACTIVE ELEMENTS
U RADIOACTIVE ISOTOPES

RADIOACTIVE FALLOUT PARTICLES
U FALLOUT

RADIOACTIVE ISOTOPES
NT COBALT 60
NT PLUTONIUM 238
NT SODIUM 24
Russian monograph on radioactive isotopes effects on organisms covering metabolism, elimination, acceleration methods, pathogenesis and treatment of damage, toxicity, biological action, etc
p0590 A73-12865
Video instrumentation for radionuclide angiocardiography.
p0348 A73-37796
Computer program for measuring specific radioisotopes contained in human body
[AD-745578] p0593 N73-10078
Internally deposited radioisotope effects on cell populations in mammals
[NYO-3970-29] p0099 N73-14074

RADIOACTIVE MATERIALS
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680

RADIOACTIVE NUCLIDES
U RADIOACTIVE ISOTOPES

RADIOACTIVE WASTES
Extraterrestrial disposal of radioactive waste from thermoelectric propulsion
[NASA-TM-X-62272] p0366 N73-27943

RADIOBIOLOGY
Russian book on radiation genetics of microorganisms covering lethal and mutagenic action of radiation on fungi, microscopic algae, bacteria and viruses
p0060 A73-15701
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure
p0087 A73-17685
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria.
p0117 A73-19483
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499
Russian book - Primary and initial processes of the biological action of radiation.
p0312 A73-35896
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
Articles and abstracts of articles concerning radiobiology
[AEC-TR-7306] p0066 N73-12103
Charged particle energy deposition calculations for radiobiological system
[ORO-3798-52] p0070 N73-13090
Internally deposited radioisotope effects on cell populations in mammals
[NYO-3970-29] p0099 N73-14074
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program
p0143 N73-17057
Physical and experimental data obtained by artificial satellites for estimating extraterrestrial radiation hazard in manned space flight
[NASA-TT-F-724] p0173 N73-18098
Effects of ionizing radiation and space flight conditions on microorganisms, plants, animals, enzymes, and immunological preparations
p0173 N73-18103
Composition and effects of radioprotectors on acceleration tolerance, hypoxia toxicity, radiation protection, and dynamic space flight stress in animals
[NASA-TT-F-721] p0211 N73-20054
Physical and biomedical research by earth orbiting space stations
[AD-756771] p0294 N73-24126

RADIOCHEMISTRY
Gamma irradiation induced abiogenic radiochemical synthesis of deoxynucleosides from dry mixtures of purine bases with deoxyribose and ribose
p0396 A73-42166
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-130538] p0150 N73-17114

RADIOGRAPHY
NT ANGIOGRAPHY
Thoracic X ray photography technique for tubercular lesion detection in flight personnel, comparing to standard radiography and radioscopy
p0586 A73-12155
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798

Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation p0389 A73-41216

Electroradiography technique involving photoproduction of free electrons via Townsend avalanche amplification in diode /triode/ gap, noting increased quantum efficiency p0427 A73-44214

RADIOLOGY

Radiological assessment of the vertebral column from the point of view of aviation medicine p0409 A73-43131

The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses p0409 A73-43132

Medical examinations and protection procedures for NASA employees working in radiologically controlled areas p0143 N73-17050

RADIOMETERS
NT INFRARED DETECTORS

RADIONUCLIDES
U RADIOACTIVE ISOTOPES

RADIOPROTECTIVE AGENTS
U ANTIRADIATION DRUGS

RADIOSENSITIVITY
U RADIATION TOLERANCE

RADIOTHERAPY
U RADIATION THERAPY

RANDOM DISTRIBUTIONS
U STATISTICAL DISTRIBUTIONS

RANDOM NOISE

Random Gaussian distribution for input noise approximation in human response tracker modeling p0598 N73-10110

RANDOM PROCESSES
NT RANDOM WALK

Modelling of random human visual search performance based on physical properties of eye p0190 N73-19961

RANDOM WALK

A model of diffusion in the respiratory unit. p0391 A73-41638

RANGE (EXTREMES)
NT FREQUENCY RANGES

RANGE INDICATORS
U INDICATING INSTRUMENTS

RAPID EYE MOVEMENT STATE

Spontaneous middle ear muscle activity in man - A rapid eye movement sleep phenomenon. p0587 A73-12423

Wakefulness and sleep states in developing organism, discussing REM sleep deprivation effects on behavior, brain excitability, pharmacology and biochemistry p0052 A73-14265

Rapid eye movement state beneficial effects on memory refuted in favor of delta wave slumber, emphasizing stage 4 sleep p0093 A73-18225

Rapid eye movement analyzer. p0156 A73-22697

A vecto-oculographic approach to fast sleep eye movements in man. p0242 A73-29994

Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat. p0316 A73-36439

Variations of heart rate during sleep as a function of the sleep cycle. p0359 A73-39762

Similarities and differences concerning the sleep of two baboons, Papio hamadryas and Papio papio p0359 A73-39764

Spiral aftereffect durations following awakening from REM sleep and non-REM sleep. p0388 A73-41179

RARE EARTH ELEMENTS

Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs p0163 A73-23680

RARE GASES
NT ARGON
NT HELIUM

Fire retardance of mixtures of inert gases and oxygen. p0155 A73-22532

EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet. p0195 A73-25327

Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions p0207 A73-27701

Physiological effects on rats of replacement of atmospheric nitrogen by inert gases at high and low temperatures p0216 N73-20095

Mechanism of inert gas influence on metabolism [NASA-CR-133214] p0298 N73-25120

Food consumption and morphological indices of blood in white mice with replacement of air nitrogen by inert gases in pressurized chamber p0442 N73-33020

Mechanism of inert gas narcosis in human body and mice [NASA-CR-62096] p0445 N73-33038

RAREFACTION WAVES
U ELASTIC WAVES

RATE METERS
U MEASURING INSTRUMENTS

RATES (PER TIME)
NT ACCELERATION (PHYSICS)
NT AIRSPEED
NT ANGULAR ACCELERATION
NT ANGULAR VELOCITY
NT ARRHYTHMIA
NT BRADYCARDIA
NT BURNING RATE
NT DECELERATION
NT FLOW VELOCITY
NT GROUND SPEED
NT HEART RATE
NT HIGH ACCELERATION
NT HIGH GRAVITY ENVIRONMENTS
NT HIGH SPEED
NT HYPOVENTILATION
NT ILLUMINANCE
NT IMPACT ACCELERATION
NT IRRADIANCE
NT LUMINANCE
NT LUMINOUS INTENSITY
NT PARTICLE ACCELERATION
NT PHASE VELOCITY
NT PHYSIOLOGICAL ACCELERATION
NT PULSE RATE
NT RADIANCE
NT RADIANT FLUX DENSITY
NT RESPIRATORY RATE
NT ROTOR SPEED
NT SOUND INTENSITY
NT SUBSONIC SPEED
NT SYSTOLE
NT TACHYCARDIA

RATINGS

Nonadjectival rating scales in human response experiments. p0310 A73-35400

Linear rating scale for selecting tracking task parameters by subjective operator [AD-752036] p0151 N73-17125

RATIONS
NT SPACE RATIONS

RATIOS
NT SCALE (RATIO)
NT SIGNAL TO NOISE RATIOS

RATS

Hyperoxia effects on elimination of carbon monoxide, ammonia, ketones, and aldehydes by rats p0063 N73-12077

Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver p0063 N73-12080

Localized shielding effects on antitissue antibody mobilization in irradiated rats p0064 N73-12086

Heat regulation and adaptation of rats exposed to helium oxygen atmosphere p0065 N73-12096

Cellular activation energy effect in rat tolerance to acceleration stress [AD-749338] p0100 N73-14079

Pressure gradient measurements in swine and rats submitted to pressure pulses
[DLR-FB-71-72] p0113 N73-15164
Morphological changes in juxtaglomerular apparatus in kidneys of rats during multihour exposure to accelerations in different directions
p0133 N73-16045
Thermoregulation reactions of rats in hypoxic atmosphere with nitrogen and helium dilution
p0134 N73-16046
Effect of prolonged hypodynamia on rat biology
p0134 N73-16050
Weightlessness effects on development of vestibular apparatus and ocular nystagmus in rat, using chronic 2g centrifuge
[NASA-CR-114569] p0149 N73-17112
Transverse acceleration effects on rat gastrointestinal response to drugs
p0181 N73-19085
Transverse acceleration effects on rat hepatocytic structures
p0181 N73-19086
Hyperoxic morphological changes in connective rat tissues
p0182 N73-19092
Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control
p0182 N73-19093
Physiological effects of argon/oxygen breathing on rats noting carbon dioxide level
p0182 N73-19094
Changes in oxygen consumption in rats after inoculation with polymer combustion products
p0182 N73-19096
Toxicity of gaseous urine and feces emissions on rat organism
p0182 N73-19097
Hypoxia adaptation of rats for increased resistance to toxic atmospheric gases
p0183 N73-19100
Toxic effects of metabolic waste gases on rat organisms
p0183 N73-19101
Calcium metabolism determination in rats by measuring argon isotope in exhaled air after neutron irradiation
[NASA-CR-128816] p0186 N73-19130
Biological and toxicity effects of aluminum and other chemicals in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136
Sodium pentobarbital effects on albino rats in normocapnic and chronically hypercapnic conditions
[AD-751234] p0187 N73-19142
Hypoxia and reduced acceleration tolerance of rats after injection of cysteamine radioprotector
p0211 N73-20058
Pathophysiological response reactions of rats to acute hypoxia after injection of cysteamine and aminothiol group radioprotector
p0211 N73-20059
Effects of radioprotective drugs on motor evacuatory functions in gastrointestinal tracts of healthy and irradiated rats
p0212 N73-20062
Reactivity changes of rats to antiradiation drugs with head and stomach shielded during total irradiation
p0213 N73-20072
Pathomorphological changes in internal organs of white rats following 120 MeV proton irradiation and effect of partial shielding on attenuation of damage
p0214 N73-20076
Comparison of peripheral blood of acclimatized and nonacclimatized irradiated rats under prolonged conditions of reduced barometric pressure
p0215 N73-20088
Physiological effects on rats of replacement of atmospheric nitrogen by inert gases at high and low temperatures
p0216 N73-20095
In vitro metabolism of antipyrine in rats
[NASA-TT-F-14868] p0218 N73-20116
Effect of some radioprotective preparations on motor and evacuator function of gastrointestinal tract of healthy and irradiated rats
[DRIC-TRANS-2962] p0229 N73-21130
Dystrophic degeneration of suprarenal rat cortex during hypokinesia
p0254 N73-22003
Hyperoxic atmosphere effect on rat metabolism and elimination of gaseous wastes
p0254 N73-22004
Hemoglobin and erythrocyte increase in rat adaptation to hypoxic hypoxia
p0255 N73-22005
Altitude acclimatization period effects on rat resistance to hypoxia
p0255 N73-22006
Hypokinetic disturbances of rats after exposure to carbon monoxide
p0255 N73-22007
Long term hypokinesia effect on rats hemodynamic system
p0262 N73-23026
Long term hypokinesia effect on protein and nucleic acid content in rat tissue
p0262 N73-23027
Depressing effect of hypokinesia on rat skeletal muscle functions
p0262 N73-23028
Atrophy and metabolic changes in internal organs and skeletal muscles of rats exposed to hypokinesia
p0262 N73-23029
Centripetal acceleration for inhibiting cerebellar rat cortex activity
p0262 N73-23030
Nutrient protein intake of rats and tolerance to acute hypoxia
p0263 N73-23035
Tolerance of hypokinetic rats to carbon monoxide exposure
p0264 N73-23043
Synthesis rate of phospholipids and cytochromes b5 and P 450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064
High intensity noise effects on urinary K-Na ratios in rats
p0371 N73-29018
Influence of He, N2, and N20 environments on physiological parameters of rats
p0371 N73-29019
Microwave radiation effects on rat tissues and length of survival
p0415 N73-30904
Circadian rhythms of sleep and cerebral temperature in rats chronically exposed to hot environments
[NASA-TT-F-15082] p0417 N73-30994

RBE
U RELATIVE BIOLOGICAL EFFECTIVENESS (RBE)

RC CIRCUITS
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator
p0588 A73-12557

RC NETWORKS
U RC CIRCUITS

REACTION KINETICS
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597

REACTION TIME
Color effects in visual discrimination, measuring response times in letter matching task
p0588 A73-12525
Test field surround effects on onset and offset reaction time to foveal stimulation
p0044 A73-13558
EMG measurement on male adults for muscular relaxation reaction time interval from light stimulus onset to elbow flexor response
p0045 A73-13699
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
Effects of 24-hour sleep deprivation on rate of decrement in a 10-minute auditory reaction time task.
p0058 A73-15220
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks
p0095 A73-18470

Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
Forced guidance and distribution of practice in sequential information processing.
p0201 A73-26319
The dependence of the negative afterimage on the duration of the stimulus and the stimulus intensity
p0204 A73-26550
Estimation of the variability of the latency of responses to brief flashes.
p0204 A73-26720
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097
Flashblindness recovery following exposure to constant energy adaptive flashes.
p0238 A73-28505
Saccadic eye movement control system, investigating response characteristics to variously timed pulse stimuli
p0245 A73-30389
The Mach-Dvorak phenomenon and binocular fusion of moving stimuli.
p0245 A73-30392
Brain alpha rhythm activity relationship to perceptual and motor performance, correlating with reaction time and computer cycle time analogy
p0287 A73-33159
Temporal factors of movements in visual aftereffects
p0308 A73-34843
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
The control of eye movements in the saccadic system.
p0317 A73-36453
Sleep deprivation effects on accuracy and speed of response selection and execution.
p0385 A73-40853
Response delays and the timing of discrete motor responses.
p0387 A73-41177
Reaction times for focal and nonfocal /peripheral/ processing of simultaneously presented color and form stimuli
p0388 A73-41182
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
Effect of exercise on the response time in an identification problem
p0394 A73-41894
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705
Annotated bibliography on reaction times in selected human information processing tasks
[AD-745416] p0596 N73-10095
Runway separation standards according to reaction time of pilot manual control response to air traffic controller communication
p0598 N73-10113
Analysis of reaction time to different visual cuing methods in large displays during secondary task performance
[AD-747688] p0068 N73-12120
Response time of flash blindness recovery in human exposure to constant energy flashes
[AD-747631] p0071 N73-13095
Pilot performance under certain hypnotic, tranquilizer, and barbiturate type drugs
p0227 N73-21110
Human continuous reaction time task distribution rates for paced and selfpaced responses to visual stimuli
[IZF-1973-5] p0268 N73-23077
Pilot selection by means of concentration stress test
p0368 N73-27957
Performance decrement and response time of current and noncurrent jet Naval pilots
[AD-761463] p0421 N73-31025

REACTIVITY
Reactivity changes of rats to antiradiation drugs with head and stomach shielded during total irradiation
p0213 N73-20072

REACTOR CHEMISTRY
U RADIOCHEMISTRY

REACTOR FUELS
U NUCLEAR FUELS

READJUSTMENT
U ADJUSTING

REAL TIME OPERATION
Digital filters applicable to electroencephalographic pattern recognition.
p0582 A73-11464
Real time hybrid computer audio synthesis system
[AD-761730] p0369 N73-27968
Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] p0439 N73-32015

REAL VARIABLES
NT FOURIER SERIES
NT LIAPUNOV FUNCTIONS
NT MEASURE AND INTEGRATION
NT VECTOR ANALYSIS

REBREATHING
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis.
p0094 A73-18336
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068

RECEPTORS (PHYSIOLOGY)
Activity relation between internal organ receptors and skeletal muscles in terms of laws controlling process coordination
p0575 A73-10154
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
Orientation: Sensory basis; Proceedings of the Conference, New York, N.Y., February 8-10, 1971.
p0091 A73-18030
Book - Sensory coding in the mammalian nervous system.
p0199 A73-25799
Adaptability and receptivity factors affecting motion sickness susceptibility in pilots
p0225 N73-21095

RECLAMATION
NT WATER RECLAMATION

RECOGNITION
NT CHARACTER RECOGNITION
NT PATTERN RECOGNITION
NT SPEECH RECOGNITION
NT TARGET RECOGNITION

RECONNAISSANCE
NT AERIAL RECONNAISSANCE

RECORDING
NT DATA RECORDING
NT DATA SMOOTHING
NT MAGNETIC RECORDING
NT PHOTOGRAPHIC RECORDING

RECORDING INSTRUMENTS
NT FLIGHT RECORDERS
NT MECHANOGRAMS
NT OSCILLOGRAPHS
NT PRESSURE RECORDERS
Automatic pulse count recorder, discussing circuit, performance and applications to laboratory and clinic
p0580 A73-10663
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932
A method for electrocardiogram recording in Rhesus monkeys
p0126 A73-21324
Modification of the electroencephalograph 4EEG-1 for polygraphy
p0154 A73-22370
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
A device for the continuous measurement of subjective changes
p0285 A73-33090
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
Performance evaluation of airborne audio-video recording system as training device in A-7D tactical fighter
[AD-744041]
p0605 N73-10161
RECOVERABLE SPACECRAFT
NT SPACE SHUTTLES
RECOVERY
Method for recovery of sunken bodies at depths of between 30 and 50 m
p0367 N73-27955
RECTUM
Routine proctosigmoidoscopic examinations of asymptotic NASA personnel for cancer prevention
p0144 N73-17061
RED BLOOD CELLS
U ERYTHROCYTES
REDUCED GRAVITY
Biomechanics of locomotion via jumping on lunar surface, discussing subgravity effects on energy requirements, body potential and kinetic energy, muscular work, etc
p0397 A73-42175
REDUCTION (CHEMISTRY)
NT HYDROGENATION
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15]
p0349 A73-37972
Bacterial reduction of organically bound phosphoric acid in blood
[NASA-TT-F-14723]
p0069 N73-13080
Refutation of microbial ability to reduce phosphate using thermochemical computations
[NASA-TT-F-14724]
p0069 N73-13081
REDUNDANT COMPONENTS
Probability estimate models for reliable function of redundant systems with adaptable and inadaptable neuron-like restoration organs
p0431 A73-44904
REDUNDANT STRUCTURES
U REDUNDANT COMPONENTS
REFERENCES (STANDARDS)
U STANDARDS
REFLECTANCE
Reflectance, transmittance and absorbance spectra of normal and six types of maize leaves
[NASA-CR-130032]
p0136 N73-16065
REFLECTION COEFFICIENT
U REFLECTANCE
REFLECTIVITY
U REFLECTANCE
REFLEXES
NT CAROTID SINUS REFLEX
NT RESPIRATORY REFLEXES
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Study of the acoustic reflex in human beings. I - Dynamic characteristics.
p0581 A73-10828
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166
Variability of normal glabellar and supraorbital reflexes in man
p0045 A73-13748
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation
p0046 A73-13786
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
Patterns of reflex excitability during the ontogenesis of sleep and wakefulness.
p0052 A73-14264
Reflex act structural components interaction in terms of reflection, creativity and organism-environment relations, noting subjective and objective perception and attitude formation
p0061 A73-15798
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system.
p0078 A73-16249
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis
p0092 A73-18163
Statistical distribution methods for analyzing formation of reflexes conditioned to time intervals between periodic unconditioned stimuli
p0093 A73-18166
Ontogenic cerebrospinal reflex activity studies, covering spinal cord morphology, reflex arches, inhibition, intracentral responses and post-tetanic potentiation
p0121 A73-20366
Effect of copper ions on the functional state of the neuromuscular apparatus
p0154 A73-22369
Organization of spontaneous muscular activity in man
p0157 A73-22863
Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677
Hippocampus contribution to conditioned reflexes, memory, voluntary motions, orientation and emotional reactions, noting theta rhythm in stimuli response
p0166 A73-24326
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
Useful future action models of instrumental reflexes and voluntary actions based on memory role in engram storage of received stimuli
p0194 A73-25199
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action

p0206 A73-27105
Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection
p0248 A73-30568
Vestibular and spinal control of eye movements.
p0316 A73-36440
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses
p0322 A73-36578
Human miniature eye movement relationship to visibility and saccades position-correcting reflex function and suppression
p0383 A73-40411
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815
Reflex arch lability in rabbits at synchronous maximum frequency of electromyographic and muscle stretching vibration measurement
p0401 A73-42659
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42679
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations
p0429 A73-44673
Upper eye lid position effects in electro-oculographic vertical eye movement recordings
p0110 N73-15143
Evoked compensatory reflex reactions of rabbit ocular and eyelid muscles during hypoxia
p0253 N73-21992
Analysis of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026

REFRACTORY PERIOD
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks
p0095 A73-18470

REGENERATION (ENGINEERING)
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951

REGENERATION (PHYSIOLOGY)
Evoked negative electrical potentials due to auditory zone stimulation by local cooling, mechanical trauma and potential recording, observing reaction regeneration variations
p0276 A73-31159
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510
Russian book on structural and functional plasticity of interneuron synapses during readjustment to chemical and physical damage covering degenerative and regenerative changes
p0389 A73-41280
Physiological regeneration of corneal epithelial mice cells exposed to strong magnetic fields
p0263 N73-23034

REGENERATIVE CYCLES
U REGENERATION (ENGINEERING)

REGIONS
NT ANTARCTIC REGIONS
NT ARCTIC REGIONS
NT HABITATS
NT SUBARCTIC REGIONS

REGRESSION (STATISTICS)
U REGRESSION ANALYSIS

REGRESSION ANALYSIS
Interdependence of oxygen uptake, heart rate and ventilation during treadmill exercise from regression slope analysis of lag logarithms
p0048 A73-14118
Double cross-validation of video cartographic symbol location performance.
p0082 A73-16719
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
Response surface methodology analysis of training transfer in pursuit rotor tracking task, relating three independent variables through multiple-regression prediction equations
p0430 A73-44774
Prediction equation validity for response surface methodology analysis of surveillance tracking by human operators, comparing variance and regression procedures
p0431 A73-44776

REGULATORS
NT OXYGEN REGULATORS
NT PRESSURE REGULATORS

REHEATING
U HEATING

REINFORCEMENT (PSYCHOLOGY)
Learning ability of rats to regulate hypoxic ambient atmosphere by instrumental response, discussing motivation and reinforcement factors
p0095 A73-18439
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection
p0248 A73-30568
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Reinforcement effects on human attention and performance in continuous response to visual stimuli
[AD-747798] p0072 N73-13103
Expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057
Relation of conditioned reactions to evaluation of results of forthcoming reinforcement
p0449 N73-33065
Behavior of dogs when given choice of various reinforcements
p0449 N73-33066
Structure and functions of central mechanisms of reinforcement
p0449 N73-33067

RELATIVE BIOLOGICAL EFFECTIVENESS (RBE)
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
Probability cross sections of heavy ion single hit inactivation paths for human cells using nitrogen ion accelerator experiments
p0398 A73-42183
Relative biological effectiveness of fast neutrons with gamma background
p0215 N73-20091

RELAXATION (MECHANICS)
NT STRESS RELAXATION

RELAXATION (PHYSIOLOGY)
EMG measurement on male adults for muscular relaxation reaction time interval from light stimulus onset to elbow flexor response
p0045 A73-13699
Volume-pressure characteristics of rib cage-diaphragm interaction in standing subjects during voluntary relaxation
p0359 A73-39778

RELIABILITY
NT COMPONENT RELIABILITY

RELIABILITY ANALYSIS
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778

Indicators and controls for validating human reliability data
[AD-744551] p0594 N73-10085
RELIABILITY CONTROL
U QUALITY CONTROL
REMOTE CONTROL
A remotely operated ECG telemeter for chronic implantation in rats.
p0054 A73-14303
The mathematics of coordinated control of prosthetic arms and manipulators.
[ASME PAPER 72-WA/AUT-4] p0061 A73-15884
Man-machine interface for controllers and end effectors.
p0344 A73-37325
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085
Computerized teleoperator manual control system for remote mechanical hand
p0602 A73-10143
Concept evaluation and subsystem analyses for design of remote controlled teleoperator visual system
[NASA-CR-124059] p0150 N73-17117
Construction of remote controlled mechanical manipulators using biodynamic principles
[NASA-TT-F-14889] p0232 N73-21152
Long range objectives of design and control study of remote manipulators
[NASA-CR-124191] p0259 N73-22046
Design of automatic controlled remote arm mechanism incorporating feedback information
[NASA-CR-2238] p0260 N73-22055
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems
[NASA-TT-F-14336] p0335 N73-26073
Volumetric kinematic analysis on servomechanism of remote handling manipulator
p0335 N73-26075
Design requirements for remotely controlled master-slave manipulators
p0335 N73-26076
Remote control of underwater manipulator using cables and automatic servomechanics
p0335 N73-26078
Structural design of computer controlled manipulator for remote handling
p0335 N73-26079
Remotely controlled manipulators with independent follow-up and force reproduction mechanisms
p0336 N73-26082
REMOTE HANDLING
Operation of spacecraft in orbit with the aid of remote-controlled manipulators - A joint project of ERNA, KYBERTRONIC, KLEBA
[DGLR PAPER 72-098] p0584 A73-11659
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085
Experiments in video camera positioning with regard to remote manipulators
[NASA-CR-124190] p0221 N73-20139
REMOTE REGIONS
NT ANTARCTIC REGIONS
NT ARCTIC REGIONS
REMOTE SENSORS
The oculometer in remote viewing systems.
p0344 A73-37320
Remote sensing application to habitat of mosquito vectors of disease, considering St. Louis and Venezuelan encephalitis strains and human filariasis
p0363 A73-39866
Remote detection of water content and spectral properties of leaves in different soybean crop species
p0068 N73-13070
Application of remote sensing techniques to public health
[NASA-CR-129822] p0099 N73-14069
Remote sensing techniques for detection and prevention of Rocky Mountain spotted fever, Encephalitis, Malaria, and Red Tide environmental health problems
[NASA-CR-128727] p0135 N73-16060
Multispectral remote sensing techniques for identification of corn blight disease
[NASA-TM-X-69055] p0136 N73-16064
Multispectral remote sensing techniques applied to study changes in wildlife habitats
p0142 N73-16396
Research in aircraft noise and sonic booms reduction, remote sensing of water pollution, and earth surface changes
[DLR-MITT-72-15] p0232 N73-21153
Long range objectives of design and control study of remote manipulators
[NASA-CR-124191] p0259 N73-22046
REMS
U RAPID EYE MOVEMENT STATE
RENAL FUNCTION
Renal vascular response to saline infusion from radioactive Xe washout and sodium excretion concentration data
p0577 A73-10170
Renal component of the antigravitation function of the organism
p0123 A73-20976
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours
p0123 A73-20978
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199
Renal lithiasis among civil operating aircrew
p0127 A73-21536
Renal lithiasis among military operating aircrew
p0128 A73-21537
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Activity variations of some renal enzymes during stepwise increased hypoxia
p0323 A73-36582
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature.
p0390 A73-41438
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655
An analoque-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
Renal component of antigravitational function in body
p0133 N73-16043
Renin-angiotension system in simulated hypervolemia induced by immersion
[NASA-TT-F-14885] p0258 N73-22036
RENDEZVOUS
NT ORBITAL RENDEZVOUS
REPAIRING
U MAINTENANCE
REPRODUCTIVE SYSTEMS
NT TESTES
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422
Advantages of breeding Rhesus monkeys in compounds for biomedical research
p0266 N73-23063
REPUBLIC MILITARY AIRCRAFT
U MILITARY AIRCRAFT
RESCUE OPERATIONS
Electronic location finder radio antenna homing system for helicopter search and rescue of downed air crewmen
[AHS PREPRINT 720] p0309 A73-35061
Helicopter performance in civilian air rescue operations
[AD-748695] p0101 N73-14087
Position reporting and communications systems of aviation and marine rescue operations
[AD-761756] p0369 N73-27967

Analysis of US Navy aviation combat casualty experiences in Southeast Asia to determine effectiveness of rescue and recovery operations under combat conditions
[AD-761636] p0370 N73-27972
Operational investigation of combined all weather capabilities of Coast Guard motor lifeboat and 70 knot surface effect rescue vehicle
[AD-761460] p0370 N73-27974

RESEARCH
NT DYNAMIC PROGRAMMING
Methods and procedures for ergonomic research
p0414 N73-30086

RESEARCH AND DEVELOPMENT
Effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-129603] p0063 N73-12074
Prolonged weightlessness for 300 plus days and cardiac performance in primates
[NASA-CR-129512] p0063 N73-12075
Engineering psychology for developing practical designs of man machine systems
[AD-748237] p0074 N73-13121
Research and development in Army aviation medical science and problems
[AD-749456] p0108 N73-15129
Physiological research in support of manned space flight
[NASA-CR-128741] p0186 N73-19129
Cybernetic integration of experiments into CVT system
[NASA-CR-124150] p0230 N73-21136

RESEARCH FACILITIES
Feasibility of effective exercise and health evaluation and enhancement program for NASA employees
p0147 N73-17091
Microbiological inspections of NASA food handling facilities
[NASA-TM-X-64734] p0220 N73-20127

RESEARCH MANAGEMENT
Articles on methodology and historical importance of scientific research in creativity
[TT-70-57147-2] p0413 N73-30075

RESEARCH PROJECTS
Research on laser irradiation effects, sensory psychophysiology, and human blood processing for military medicine
[AD-749440] p0108 N73-15130
Review of papers presented at Conference on Space Biology and Aerospace Medicine
[JPRS-58345] p0176 N73-18125
Research activities in exobiology and aerospace medicine
[JPRS-59015] p0262 N73-23024
Cryobiological and space biological studies
[JPRS-59129] p0293 N73-24120
Studies in hypoxia and phylogenetics by USSR aerospace medical scientist
[NASA-TT-F-15101] p0417 N73-30991

RESIDENTIAL AREAS
Evaporation rates and toxic plume dispersion for defining downwind evacuation areas for populations adjacent to accidental propellent spills on shipping routes
[NASA-TM-X-68188] p0141 N73-16097

RESIDUES
Serial segments method for measuring pilot manual control remnant in vicinity of sine waves
p0601 N73-10136

RESINS
NT ION EXCHANGE RESINS

RESISTIVITY
U ELECTRICAL RESISTIVITY

RESISTORS
Photoelectric servo simulator for pupil, using Wheatstone bridge with CdS light dependent resistor
p0246 A73-30399

RESOLVENTS
U PROBLEM SOLVING

RESONANCE
NT NUCLEAR MAGNETIC RESONANCE
NT PROTON MAGNETIC RESONANCE

RESONANT FREQUENCIES
Three models of the vibrating ulna.
p0347 A73-37543

RESOURCE ALLOCATION
Multidimensional judgments in design of ideal organisms with integral number of resource units allocated among characteristics such as memory, vision, resourcefulness, etc
p0044 A73-13559

RESOURCES
NT EARTH RESOURCES

RESOURCES MANAGEMENT
NT LAND MANAGEMENT
Conservational and rational use of natural resources and wildlife to preserve biosphere environment
[JPRS-58429] p0222 N73-20145

RESPIRATION
NT HIGH ALTITUDE BREATHING
NT LIQUID BREATHING
NT PRESSURE BREATHING
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes.
p0579 A73-10625
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude.
p0042 A73-13500
Interdependence of oxygen uptake, heart rate and ventilation during treadmill exercise from regression slope analysis of lag logarithms
p0048 A73-14118
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
Respiratory air flow telemetry during exercise, discussing flowmeter working conditions and equipment testing
p0053 A73-14286
Oxygen partial pressure measurement in respiratory air via radio telemetry system with polarographic catheter electrode pressure sensor
p0053 A73-14287
Radio telemetric measurements of oxygen consumption during exercise via respiratory air flow and oxygen partial pressure monitors, considering water vapor and temperature
p0053 A73-14288
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
Biological role of atmospheric oxygen in the mechanism of blood coagulation
p0087 A73-17678
Electrical operational and pneumatic /variometer/ differentiation recording of displaced volume derivative from pneumotachograph in spontaneous breathing
p0159 A73-22937
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Blood pressure and body temperature dynamic control systems and respiration relationship to heart rate variability
p0250 A73-30878
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463

Postural effects on respiration, pulmonary ventilation, oxygen uptake and inhalation and exhalation volumes during asana /yoga gymnastics/ exercises executed by athletes
p0322 A73-36573

Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660

Pulmonary volume, respiration rate and alveolar air carbon dioxide content measurements in pilots during flight, noting hyperventilation occurrence
p0343 A73-37197

Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397

Changes in lung capacity, air passage resistance, and dynamic compliance of humans during water immersion to simulate weightlessness
p0135 N73-16053

Human ability to note changes in composition of inhaled air
p0182 N73-19090

Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106

RESPIRATORS

Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408

RESPIRATORY DISEASES

NT AEROSINUSITIS
NT INFLUENZA
NT PNEUMONIA
NT TUBERCULOSIS

Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501

Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680

Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939

Method of PaCO2 determination in men with functional disorders of external respiration
p0239 A73-29075

Development and reversibility of pulmonary oxygen poisoning in the rat.
p0247 A73-30516

Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781

RESPIRATORY IMPEDANCE

Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways
p0048 A73-14114

A new method for simultaneous measurement of total respiratory resistance and compliance.
p0084 A73-16799

Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683

Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217

Control of the duration of expiration.
p0391 A73-41635

External airway resistance effects on ventilation and carbon dioxide response during human steady state exercise
p0400 A73-42417

Submaximal exercise with increased inspiratory resistance to breathing.
p0400 A73-42419

Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067

Respiratory impedance effects on electrical activities of bulbar respiratory neurons, respiratory muscles, and pulmonary ventilation in anesthesized cats
p0064 N73-12084

RESPIRATORY PHYSIOLOGY

Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162

Bronchial tree model simulation of pressure-flow-volume relationships during expiration, using gas physics and lung physiology and anatomy data
p0577 A73-10169

Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor P from reticulocytes in the respiratory chain
p0588 A73-12510

Relationship of anginal symptoms to lung mechanics during myocardial ischemia.
p0589 A73-12820

Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
p0056 A73-14647

Responses of bulbar respiratory neurons to apparatus-aided artificial respiration
p0081 A73-16699

Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683

Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334

The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337

Predictions of the dynamic response of the lung.
p0116 A73-19477

Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645

Digital computer studies of respiratory control.
p0123 A73-20577

A model to predict respiration from VCG measurements.
p0123 A73-20578

Respiration mechanics during weightlessness simulation in an immersion medium
p0124 A73-20986

High altitude acclimatization and mountain climbing effects on human organism, considering oculomotor, cardiovascular and respiratory responses and endurance
p0124 A73-20991

Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322

Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505

On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511

Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612

Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613

A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615

Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527

'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929

Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801

Role of the medial area of the medulla oblongata in the rhythmical activity of respiratory-center neurons
p0164 A73-23804

Physiological studies of human organism adaptation to high altitudes in temporary and permanent mountain inhabitants, discussing oxygen uptake, lung ventilation and cardiac ventricle hypertrophy
p0168 A73-24514
Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
Effect of acute exposure to CO2 on lung mechanics in normal man.
p0200 A73-26216
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Human respiration under increased pressures.
p0205 A73-26924
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Effects of vagotomy on the impulse activity of respiratory neurons
p0276 A73-31160
Aspects of air flow to the olfactory region of the human nose
p0276 A73-31163
Changes in respiration effectiveness during muscular activity
p0323 A73-36580
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Molecular diffusion model of cardiogenic gas mixing during inspiration at alveolar boundary in dogs
p0323 A73-36652
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656
Adequacy of the Haldane transformation in the computation of exercise oxygen consumption in man.
p0324 A73-36658
Human calorimeter with a new type of gradient layer.
p0324 A73-36662
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780
Ventilatory and hemodynamic responses to acute hypoxia and hypercapnia in Hereford calf, comparing with man
p0360 A73-39782
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
A model of diffusion in the respiratory unit.
p0391 A73-41638
Gas transport in the human lung.
p0400 A73-42421
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043
Role of respiratory enzymes on human adaptation to hypoxia
[NASA-TT-F-15058] p0411 N73-30060

RESPIRATORY RATE
NT HYPOVENTILATION
Passive and active warm-up effects on track athletes heart and respiration rates
p0042 A73-13123
Multichannel PDM-FM biomedical radio telemetry system for ECG, respiratory rate and oxygen consumption during exercise, considering transmitter and receiver design
p0052 A73-14278
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034
A respirometer for the continuous measurement of respiration volume with remote transmission
p0119 A73-20035
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2.
p0359 A73-39777
Human intrapair twin differences, examining age, height, weight, heart volume, metabolism, respiratory rate and monozygous/dizygous differences
p0361 A73-39792
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Control of the duration of expiration.
p0391 A73-41635
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636
Respiratory work minimization during exercise, using respiratory frequency, functional residual capacity and air flow pattern effects as controlled variables
p0433 A73-45066
Correlation of respiratory distress and ultrasonic transmission with severe decompression sickness in hamsters
[AD-743475] p0595 N73-10091
Automatic device for measuring human metabolic oxygen rate and breathing dynamics
[NASA-CASE-MFS-21415-1] p0112 N73-15156
Pathogenesis of some respiratory and circulatory reactions accompanying drop in barometric pressure
p0134 N73-16047
Transverse acceleration effects on human respiratory rate and oxygen metabolism
p0181 N73-19084
Influence of isolated heating of spinal column on respiratory rate and panting in dogs
[NASA-TT-F-14998] p0338 N73-27054
Inflight heart and respiratory rate recording of pilots, using nose clip transducers
p0367 N73-27953
Influence of He, N2, and N2O environments on physiological parameters of rats
p0371 N73-29019
Human circadian rhythms of blood circulation, respiration and catabolism under flight simulation stress
[DLR-FB-72-49] p0413 N73-30073
Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] p0439 N73-32015

RESPIRATORY REFLEXES
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501

The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
Pathogenesis of some respiration and circulation reactions to barometric pressure gradients
p0123 A73-20980
Ventilation at transition from rest to exercise.
p0436 A73-45375
Barotrauma mechanoreceptor reflex effects on animal respiratory and circulatory system
p0252 N73-21982

RESPIRATORY SYSTEM
NT BRONCHI
NT DIAPHRAGM (ANATOMY)
NT LUNGS
NT NOSE (ANATOMY)
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172
Formalization of certain functional aspects of the external respiration system
p0580 A73-10657
Indexes of ventilation distribution before/after airway occlusion in dogs, indicating collateral channel inspired gas distribution reduction
p0048 A73-14113
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles
p0084 A73-16735
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490
Breath to breath cyclical variations in functional residual capacity, oxygen uptake, carbon dioxide release, tidal volume, respiratory period, alveolar gas tension and heart rate
p0278 A73-31346
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915
Nonthermal metabolic response of rats to He-02, N2-02, and Ar-02 at 1 atm.
p0399 A73-42201
Effects of gravitational and inertial forces on cardiovascular and respiratory dynamics [NASA-CR-129603]
p0063 N73-12074
Factors relevant to respiratory support and equipment design
p0105 N73-15102
Respiratory models for studying hazards of air pollution [UR-3490-169]
p0107 N73-15121
Cardiovascular and respiratory systems reactions in cosmonauts during space flight
p0180 N73-19079
Instrumentation and techniques for determining effects of gravitational and inertial forces on cardiovascular and respiratory dynamics [NASA-CR-133212]
p0298 N73-25119
Evaluation of energy expenditures and reactions of cardiovascular and respiratory systems to physical work [NASA-TT-F-15090]
p0437 N73-31997
Change in impulse activity of neurons in respiratory center during electric stimulation of vestibular nerve and dorsal roots in spinal cord
p0442 N73-33017

RESPIROMETERS
A respirometer for the continuous measurement of respiration volume with remote transmission
p0119 A73-20035
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Automatic device for measuring human metabolic oxygen rate and breathing dynamics [NASA-CASE-MFS-21415-1]
p0112 N73-15156

RESPONSE BIAS
Dynamic response of vestibular nuclei neurons of decerebrated cats subjected to sinusoidal rotation [AMRU-R-70-2]
p0606 N73-11059
Asymmetric response of cat semicircular canal neurons to symmetric sinusoidal rotation [AMRU-R-69-2]
p0607 N73-11060
Response characteristics of vestibulo-ocular reflex arc [AMRU-R-71-2]
p0608 N73-11067
Mechanical response of otolith-dependent units of cats to sinusoidal linear acceleration [AMRU-R-69-3]
p0608 N73-11068

RESPONSES
NT DYNAMIC RESPONSE
NT FREQUENCY RESPONSE
NT GALVANIC SKIN RESPONSE
NT HEMODYNAMIC RESPONSES
NT PHYSIOLOGICAL RESPONSES
NT TIME RESPONSE
NT TRANSIENT RESPONSE
Response variations of microphone worn on human body [BM-RI-7810]
p0376 N73-29058

REST
NT BED REST
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755
Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622
Adenin-nucleotides NAD(plus) and NADH in skeletal muscles during intensive work and at rest [NASA-TT-F-14856]
p0219 N73-20118

RESTRAINTS
U CONSTRAINTS

RESUSCITATION
Responses of bulbar respiratory neurons to apparatus-aided artificial respiration
p0081 A73-16699
Organism-machine interactions in hybrid control systems for cardiac stimulation, artificial breathing apparatus and intelligence assignments
p0159 A73-23298

RETENTION (PSYCHOLOGY)
Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160
Rapid eye movement state beneficial effects on memory refuted in favor of delta wave slumber, emphasizing stage 4 sleep
p0093 A73-18225
A method for the investigation of interpolated information and time effects in short term retention.
p0096 A73-18475
Retention of information in the iconic visual memory during recognition of images of varying complexity
p0199 A73-26084
Eye movements during visual search and memory search.
p0239 A73-29125
Overview of literature concerning retention of learned skills with emphasis on space flight skill retention [NASA-CR-128611]
p0603 N73-10152

RETICULOCYTES
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor F from reticulocytes in the respiratory chain
p0588 A73-12510

RETINA
NT FOVEA
NT VISUAL PIGMENTS
Airline flight and ground personnel fatigue and orthostatic hypotension syndrome manifested by variations in retinal arterial pressure and brain circulation
p0586 A73-12156
A minor perturbing effect of retinal locus on dot pattern recognition - Rejection of a possible

artifact.
p0588 A73-12524
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
ERG late photoreceptor potential components time course in macaque monkey cones and rods, noting pure cone foveal response
p0046 A73-13761
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel. [AD-754147]
p0050 A73-14164
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Visual function as sum of visual acuity and visual field, considering role of resolution and detection tasks in retinal function examinations
p0079 A73-16478
Rod vision chemistry in terms of rhodopsin, visual cycle and pigment-vision relations, considering dark and light adaptation
p0079 A73-16479
Photochemical receptor mechanism of chromatic vision and scotopic contrast hue sensation due to cone and rod activity interaction
p0121 A73-20261
Modified rhodopsin in the pigment epithelium.
p0121 A73-20263
Contrast and assimilation effects analysis based on receptive field models of vertebrate retinal function
p0123 A73-20812
The morphological organization of the vertebrate retina.
p0160 A73-23304
The structure and reactions of visual pigments.
p0160 A73-23306
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms
p0162 A73-23317
Frog retinal metabolism in photoreceptors during dark and light adaptation, using ERG, radiospirometry, oxygen uptake polarography and pyridine spectrophotometric assay
p0162 A73-23319
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681
Visual acuity as a function of exposure duration.
p0165 A73-23838
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
Deficits in visual function associated with laser irradiation.
p0169 A73-24563
Retinal damage thresholds for multiple pulse lasers. [AD-758530]
p0196 A73-25341
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
Light adaptation of the late receptor potential in the cat retina.
p0236 A73-28352
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Retinal damage from repeated subthreshold exposures using a ruby laser photocoagulator.
p0238 A73-28508
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers
p0242 A73-29875
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Oscillatory waves in intraretinally recorded electroretinograms in primates, considering electrode depth, stimulus duration and intensity and background illumination, anesthesia and tetrodotoxin effects
p0245 A73-30393
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Servo-controlled moving stimulus generator for single unit studies in vision.
p0246 A73-30401
Human cone optical density estimation implications of conflicting results for luminosity at bleaching intensities in dichromats related to use of psychophysical data
p0246 A73-30402
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system
p0277 A73-31173
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925
Ribes Nigrum anthocyanosides in ophthalmology
p0330 A73-36935
Investigation of the geometry of the dendritic tree of retinal ganglion cells
p0349 A73-37944
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
Argon-ion laser used to determine ocular effects of repetitive laser pulses on rhesus monkeys [AD-746795]
p0071 N73-13096

Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097
Argon laser radiation damage to retina of diabetic and nondiabetic patients
[AD-747058] p0071 N73-13099
Chorioretinal burn hazards of high intensity radiation sources in industry
p0145 N73-17071
Modelling of random human visual search performance based on physical properties of eye
p0190 N73-19961
Retinal damage in monkeys exposed to near infrared gallium arsenide laser pulses
[AD-753419] p0221 N73-20135
Influence of excitation surface with liminary brightness on different regions of the retina
[NASA-TT-F-15124] p0440 N73-32017

RETINAL ADAPTATION
NT DARK ADAPTATION
NT LIGHT ADAPTATION
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
Visual work duration and intensity effects on optic papillae expansions and shape alterations, noting differences between trained and untrained subjects
p0080 A73-16694
Human receptive visual field adaptation characteristics for stabilized retinal images by psychophysical probe detection technique
p0120 A73-20252
Psychophysical areal summation and stimulus contour and threshold visibility effects on size selective adaptation in human vision for single- and multichannel models
p0128 A73-21563
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
The influence of wavelength on visual adaptation to spatially periodic stimuli.
p0200 A73-26199
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
Cone spectral sensitivity studied with an ERG method.
p0236 A73-28358
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
The macular and paramacular local electroretinograms of the human retina and their clinical application.
p0237 A73-28364
Linear summation of spatial harmonics in human vision.
p0345 A73-37411
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418
Disparity detectors in human depth perception - Evidence for directional selectivity.
p0383 A73-40413
Comparison of tilt and displacement adaptation in visual perception, establishing qualitative differences by interocular transformation magnitude and exposure time methods
p0388 A73-41188
Optimal input rates for tilt adaptation.
p0401 A73-42500
Stimulus specificity in the human visual system.
p0407 A73-42960
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light
p0425 A73-43791
Literature concerning retinal adaptation to varying light intensities
[NASA-TT-F-15036] p0450 N73-33074

RETINAL IMAGES
Extraretinal feedback and visual localization.
p0579 A73-10437
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area
p0583 A73-11503
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions
p0046 A73-13764
Axiomatic mathematical model for human visual edge contrast based on additivity, one-dimensionality and contrast continuity parameters
p0060 A73-15788
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures
p0060 A73-15789
Visibility, resolution and spatial acuities in terms of target-background contrast, diffraction, luminance, stimuli wavelength and anatomical variations effects on retinal images
p0079 A73-16477
The control of sensitivity in the retina.
p0097 A73-18673
Vernier alignment acuity task accuracy related to retinal image line position location, noting effect of high contrast grating background
p0120 A73-20159
Human receptive visual field adaptation characteristics for stabilized retinal images by psychophysical probe detection technique
p0120 A73-20252
Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli
p0120 A73-20257
Cyclofusional stimulation effects on retinal image disparity in terms of central component and Panum fusional areas
p0121 A73-20265
Saccadic suppression for structured background as function of visual image pattern and threshold detection elevation in central nervous system
p0121 A73-20267
Human retina-patterned ideal perceiving machine to calculate visual acuities for spatial arrangement in line figures
p0129 A73-21564
Single cell analysis of saturation discrimination in the macaque.
p0129 A73-21568
Polarity cue for visual accomodation response of trained subjects to target motion direction change, considering retinal image blur and feedback relation
p0129 A73-21569
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
Receptive fields of retinal ganglion cells.
p0161 A73-23315
Retinal mechanisms of colour vision.
p0161 A73-23316
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
A clinical method for obtaining pattern visual evoked responses.

p0236 A73-28357
Scotopic electroretinography and visual evoked responses under adaptive illumination, comparing blind spot stray light with parafoveal stimulation
p0237 A73-28361
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies.
p0308 A73-34839
Extended border enhancement during intermittent illumination - Binocular effects.
p0308 A73-34842
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
Distance perception and the ambiguity of visual stimulation - A theoretical note.
p0311 A73-35492
Stereoscopic vision - Cortical limitations and a disparity scaling effect.
p0312 A73-35922
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
Eye movements necessary for continuous perception during stabilization of retinal images.
p0318 A73-36461
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463
Spatial characteristics of chromatic induction - The segregation of lateral effects from straylight artefacts.
p0346 A73-37419
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
Soviet book on visual image formation on retina covering perception, stabilization, manipulative ability, etc
p0406 A73-42869
Visual image generation as textured flight information resembling retinal images for airborne flight simulation
p0600 N73-10128
Physiological control system for stabilization of retinal image in humans
p0110 N73-15141
Vestibular stimulation effect in human and animal retinal image stabilization
p0110 N73-15144
Optical modulation transfer functions of human eye for white light
[IZF-1973-2] p0264 N73-23047

RETIREMENT
Functional aging - Present status of assessments regarding airline pilot retirement.
p0387 A73-41161
Motivational patterns underlying devolunteering by submarine graduate school personnel
[AD-749324] p0260 N73-22054

RETROSEQUENCING
U SEQUENTIAL CONTROL

REUSABLE SPACECRAFT
NT SPACE SHUTTLES

REVERBERATION
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678

REVERSE TIME
U REACTION TIME

REVERSING
Systems engineering for design of two dimensional automatic manipulator control system using reversible follow-up
p0335 N73-26081

RF-4 AIRCRAFT
U F-4 AIRCRAFT

RH-2 HELICOPTER
U UH-1 HELICOPTER

RHEOENCEPHALOGRAPHY
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies
p0193 A73-25041

RHEOGRAPHY
U RECORDING INSTRUMENTS
U RHEOMETERS

RHEOLOGY
Feasibility of multichannel rheography for studying cardiovascular system on centrifuge
p0065 N73-12094
Effect of fibrinogen concentration on viscosity of human blood
[DLR-FB-73-54] p0446 N73-33046

RHEOMETERS
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292
Modification of the electroencephalograph 4EEG-1 for polygraphy
p0154 A73-22370
Effect of physical exercises on the lung rheogram
p0169 A73-24524
Stroke volume measurement from an integral rheogram of human body
p0429 A73-44719

RHIZOPUS
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900

RHYTHM (BIOLOGY)
NT CIRCADIAN RHYTHMS
Vector summation dial for analysis of time-nonstationary cyclic biological data, applying to peak time change detection and random walks
p0049 A73-14120
Psychological and physiological components of biorhythm cycles governing periodic variations in physical, emotional and intellectual performance
p0082 A73-16720
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Role of the medial area of the medulla oblongata in the rhythmical activity of respiratory-center neurons
p0164 A73-23804
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens
p0235 A73-28283
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/.
p0282 A73-32185
Book - Biological rhythms and human performance.
p0286 A73-33154
The explanation and investigation of biological rhythms.
p0286 A73-33155
Brain alpha rhythm activity relationship to perceptual and motor performance, correlating with reaction time and computer cycle time analogy
p0287 A73-33159
Industrial work rhythm and between-day fluctuation studies 1920-1969, emphasizing industrial record and between-day fluctuations
p0287 A73-33160

Visual responsiveness repeat variability magnitude during prolonged sessions and time of day
p0357 A73-39479
Investigation of the nature of biological rhythm sensors by means of automatic networks
p0393 A73-41865
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718
Effects of prolonged bed rest on body temperature and heart rate periodicity in man
p0175 N73-18113
Prolonged bed rest effects on human blood hormone level periodicities
p0175 N73-18114
Mechanisms for controlling physiological rhythms in Rana pipiens
[NASA-CR-131153] p0179 N73-19064
Spectral analysis on human biorhythmic performance to evaluate tranquilizer effects
p0228 N73-21116
Effects of human biorhythms on chemotherapy and drug evaluation
p0228 N73-21119

RIBONUCLEIC ACIDS
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
Informational biopolymer structure in early living forms.
p0090 A73-17946
Ribosomal RNA base composition and molecular evolution in plants and animals of various taxonomic groups
p0116 A73-19220
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513
RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system
p0249 A73-30842
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166
Protein and nucleic acid contents in animal tissues under hypokinesia
p0279 A73-31503
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex
p0384 A73-40750
Biosynthesis of RNA in the brain cortex during various functional states
p0389 A73-41262
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
Proton magnetic resonance spectra of ribonuclease A inhibitor complexes, noting effect on catalytic activity
[BMVG-FBWT-72-13] p0137 N73-16074
Ultraviolet radiation, X rays, freezing, and thawing effects on ribonuclease
p0185 N73-19120
Synthesis rate of phospholipids and cytochromes b5 and P 450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064

RIBOSE
Ultracentrifugation of biological materials
[NASA-CR-114673] p0438 N73-32009

RICHARDSON-DUSHMAN EQUATION
U TEMPERATURE EFFECTS

RIEMANN INTEGRAL
U MEASURE AND INTEGRATION

RISK
Impulse noise damage risk criteria.
p0310 A73-35327
Risk scoring system for identifying subjects with high risk to coronary heart disease
p0146 N73-17080

RNA
U RIBONUCLEIC ACIDS

ROBOTS
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
Computerized simulation of three dimensional robots using generalized cylinder descriptions
[AD-755139] p0223 N73-20152
Vision model for robot object recognition system
[NASA-CR-133458] p0365 N73-27936
Automation of computer controlled robot manipulators
[JPRS-59717] p0375 N73-29051

ROCKET CHAMBERS
U THRUST CHAMBERS

ROCKET COMBUSTORS
U THRUST CHAMBERS

ROCKET EXHAUST
Toxicological properties of rocket exhaust products and blood analysis for beryllium oxide content
[AD-754936] p0220 N73-20131

ROCKET FLIGHT
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights.
p0582 A73-11209

ROCKET LAUNCHING
Russian book on rocket weapon systems safety handling covering HF electromagnetic, noise and vibration effects, ionizing radiation, fire, etc
p0393 A73-41874

ROCKET OXIDIZERS
The acute inhalation toxicology of chlorine pentafluoride.
p0282 A73-32173

ROCKET PROPELLANTS
Rocket propellant handling personnel protective clothing, describing head gear, ventilated underwear and airtight external suit
p0115 A73-18949
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043

ROCKS
NT LUNAR ROCKS
NT SHALES
Influence of blue green algae on crystalline calcium carbonate formation on river rocks
[NASA-TT-F-15028] p0375 N73-29046

RODENTS
NT GUINEA PIGS
NT HAMSTERS
NT MICE
NT RABBITS
NT RATS

ROLL
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147

ROOMS
NT CLEAN ROOMS

ROTARY DRIVES
U MECHANICAL DRIVES

ROTARY WING AIRCRAFT
NT HELICOPTERS
NT P-531 HELICOPTER
NT UH-1 HELICOPTER

ROTATING
U ROTATION

ROTATING BODIES
Rotating target providing high yield neutrons by He-4 reaction for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067

ROTATING CONES
U ROTATING BODIES

ROTATING ENVIRONMENTS
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250

Differential effects of central versus peripheral vision on egocentric and exocentric motion perception. p0201 A73-26221
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation p0242 A73-30022
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems p0280 A73-31518
Visual-vestibular interaction and motion perception. p0318 A73-36460
Direction-specific adaptation effects acquired by humans in slowly rotating room [NASA-CR-129063] p0591 N73-10062
Dynamic model of rotating spacecraft force effects on human vestibular system p0599 N73-10119
Tests to determine physiological and behavioral response to transitions between rotating and nonrotating environments [NASA-CR-2130] p0611 N73-11093
Effects of simulated artificial gravity on human performance [NASA-CR-2129] p0067 N73-12111

ROTATING VEHICLES
U ROTATING BODIES

ROTATION
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory. p0234 A73-28094
Vestibulo-ocular response of man to oscillatory rotation during sleep [AMRU-R-70-3] p0608 N73-11066
Human semicircular canal response to rotational stimuli in yaw, pitch, and roll planes of the head p0109 N73-15137
Anti-compensatory oculomotor response of pilot to rotational head stimuli p0109 N73-15138

ROTATIONAL FLOW
U FLUID FLOW

ROTOR SPEED
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154

ROUGHNESS
NT SURFACE ROUGHNESS

RUBIDIUM
Cation exchange binding of rubidium and cesium by rat liver cell microsomes. p0588 A73-12549

RUNNING
Correlation of assessed maximum oxygen intake with predicted performance in running events [AD-746867] p0071 N73-13093

RUNWAY ALIGNMENT
Runway separation standards according to reaction time of pilot manual control response to air traffic controller communication p0598 N73-10113

RYAN MILITARY AIRCRAFT
U MILITARY AIRCRAFT

S

SAFETY
NT AIRCRAFT SAFETY
NT FLIGHT SAFETY
NT INDUSTRIAL SAFETY
Contamination radiation safety during space flight, and safety problems at launch [JPRS-58781] p0232 N73-21149

SAFETY DEVICES
NT HELMETS
NT SEAT BELTS
NT SPACE SUITS
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system. p0117 A73-19482
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658
Helmets effectiveness evaluation from acceleration and impact tests, discussing test criteria and civilian and military standards p0286 A73-33132
Ionization, thermoluminescence, and nuclear photographic emulsion dosimetry for monitoring radiation loads in spacecrews during manned space flight p0173 N73-18100
Decelerator sled simulation for testing air bag restraint system effects in passenger motor vehicle crash [PB-212706] p0224 N73-20155
Development and characteristics of inflatable airbag restraint system for use in general aviation aircraft [FAA-RD-73-3] p0299 N73-25127
Performance of hadron laser safety eyeshields in protecting personnel from accidental ocular exposure to common laser radiation [AD-759921] p0337 N73-26099
Acoustic measurement and recording system for noise generated by air bag automobile safety device [AD-761836] p0370 N73-27977
Dynamic tests of seat belt system, seat belt/shoulder harness system, and seat belt airbag system for aircraft [FAA-NA-73-30] p0375 N73-29052
Impact resistance of crash helmets for agricultural aviation pilots [ARL/SM-NOTE-390] p0420 N73-31014

SAFETY FACTORS
Hazard and interference avoidance in implant telemetry, discussing leakage currents, muscle interference, magnetic influence, high frequency noise, electrode and respiratory artifacts, etc p0054 A73-14295
Technical and safety aspects of maintenance work on commercial aircraft wing fuel tanks, considering wing deformation effects and sealant materials and reapplications p0329 A73-36932
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation p0356 A73-39205
Safe flying, skilled personnel and aircraft maintenance assurance via safety equipment, initial and recurrent training, protective clothing and shelter from inclement weather, maintenance scheduling, etc p0357 A73-39212
Russian book on rocket weapon systems safety handling covering HF electromagnetic, noise and vibration effects, ionizing radiation, fire, etc p0393 A73-41874
Safety margins in the implementation of planetary quarantine requirements. p0395 A73-42161
Health hazards in using electron beams for welding beryllium alloys p0190 N73-19531
Microbiological investigation of neutral buoyancy simulator for weightless space environment testing [NASA-TM-X-64736] p0229 N73-21127

SAFETY HAZARDS
U HAZARDS

SAFETY MANAGEMENT
Civil aviation medicine functional standardization and expansion, emphasizing preventive medicine, health education and operational safety p0170 A73-24718

SALINE SOILS
U SOILS

SALIVA
Statistical analysis of steroid levels in parotid secretions of humans under prolonged mental stress [AD-747682] p0072 N73-13104
Feasibility of saliva analysis for measuring mental stress in man [AD-747671] p0073 N73-13111

SALTS
Water-salt homeostasis mathematical model, solving equations with analog and digital computers p0166 A73-23941

SALYUT SPACE STATION
Morphological composition of peripheral blood of

crew members of Soyuz-9 and Salyut-1
p0217 N73-20104
SAMPLED DATA
U DATA SAMPLING
SAMPLED DATA SYSTEMS
U DATA SAMPLING
SAMPLING
NT DATA SAMPLING
NT PARTICULATE SAMPLING
Suboptimal sampling and control behavior of human operator in output prediction task for automatic process
p0598 N73-10114
Automatic swabbing apparatus for sampling of microbiological surfaces
[NASA-CASE-LAR-11069-1] p0136 N73-16061
SANITATION
Sanitizing agents for cleansing and decontaminating spacecraft environment
[NASA-CR-128591] p0603 N73-10149
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program
p0143 N73-17057
Analysis of microclimate of living and service quarters during Tenth Soviet Antarctic Expedition
p0379 N73-29359
Environmental sanitation handbook for occupational medicine and health procedures at Kennedy Space Center
[NASA-TM-X-69522] p0440 N73-32020
SATELLITE DESIGN
Design principles for contamination abatement in scientific satellites.
p0584 A73-11991
SATELLITE ORBITS
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
SATELLITE RENDEZVOUS
U ORBITAL RENDEZVOUS
SATELLITE TRACKING
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134
Satellite system for tracking of wildlife and birds in natural environment
[NASA-CR-130301] p0104 N73-15090
SATELLITES
NT BIOSATELLITE 2
NT COMMUNICATION SATELLITES
NT EARTH SATELLITES
NT MOON
NT NATURAL SATELLITES
NT ORBITAL SPACE STATIONS
NT SCIENTIFIC SATELLITES
SCALE (RATIO)
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
SCALING
Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578
SCATTERING
NT LIGHT SCATTERING
NT REVERBERATION
SCHEDULING
NT PREDICTION ANALYSIS TECHNIQUES
Automated medical history questionnaire for screening industrial personnel and scheduling physical examinations
p0144 N73-17060
Computerized multivariate scheduling of physical examinations for NASA personnel in clinical intervention program
p0145 N73-17068
Human continuous reaction time task distribution rates for paced and selfpaced responses to visual stimuli
[IZF-1973-5] p0268 N73-23077
Work-rest schedule for optimum performance of monitoring tasks
p0271 N73-23987
SCIENTIFIC SATELLITES
Design principles for contamination abatement in scientific satellites.
p0584 A73-11991
SCIENTISTS
Philosophical and social psychological study of Apollo moon scientist
[NASA-CR-130832] p0176 N73-18122
SCINTILLATION COUNTERS
Video instrumentation for radionuclide angiocardiography.
p0348 A73-37796
SCINTILLATION SPECTROMETERS
U SCINTILLATION COUNTERS
U SPECTROMETERS
SCINTILLATORS
U SCINTILLATION COUNTERS
SCINTILLOMETERS
U SCINTILLATION COUNTERS
SCOPOLAMINE
U HYOSCINE
SCOUT HELICOPTER
U P-531 HELICOPTER
SCRUBBING
U WASHING
SEA WATER
Marine luminescence data for monitoring algal and pollutant concentrations
[NASA-CR-114578] p0297 N73-25114
Collection of marine fluorescence data from Atlantic, Gulf, and Pacific sites
[NASA-CR-114579] p0298 N73-25115
Effect of various parameters on long range underwater vision for narrow and broad beam illumination
p0450 N73-33630
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance
p0450 N73-33631
SEALANTS
U SEALERS
SEALERS
Technical and safety aspects of maintenance work on commercial aircraft wing fuel tanks, considering wing deformation effects and sealant materials and reapplications
p0329 A73-36932
SEALS (ANIMALS)
Receiver operating characteristics for underwater signal detection performance of sea lions
[AD-746520] p0073 N73-13113
SEARCH PROFILES
Characterization of interaction between detection and visibility processes with application to search policies
p0294 N73-24130
SEARCHING
NT SEARCH PROFILES
Eye movements during visual search and memory search.
p0239 A73-29125
Conference on human visual search and perception
[AD-754327] p0221 N73-20133
SEAS
NT CARIBBEAN SEA
SEASONAL VARIATIONS
U ANNUAL VARIATIONS
SEAT BELTS
Restraint systems /lap belts and shoulder harnesses/ for military, transport and general aviation aircraft, with emphasis on pilot and crew systems
[SAE PAPER 730291] p0306 A73-34656
Severe intraabdominal injuries without abdominal protective rigidity after an air crash - Seat belt injury
p0356 A73-39209
SEATS
NT BARANY CHAIR
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
Aircraft crash injury reduction through seat and restraint design, discussing dummy size considerations, seat belts, aircraft acceleration and injury types
[SAE PAPER 730290] p0306 A73-34655
Statistical analysis of impact injuries to seated human responding to square wave energy absorption of vertical deceleration pulse representing helicopter crash
[AD-745919] p0612 N73-11102

SECONDARY AIR
U AIR
SECRETIONS
NT ENDOCRINE SECRETIONS
NT HORMONES
NT INSULIN
NT SWEAT
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature.
p0396 A73-41438
SECULAR PERTURBATION
U LONG TERM EFFECTS
SEDATIVES
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Neuronal changes in cortical motor region cells during pharmacological induced sleep
p0257 N73-22028
SEDIMENTARY ROCKS
NT SHALES
SEDIMENTS
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723
SEEDING (INOCULATION)
U INOCULATION
SEEDS
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
SEEKERS
U HOMING DEVICES
SEIZURES
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
SELECTION
NT PERSONNEL SELECTION
NT PILOT SELECTION
SELENIUM COMPOUNDS
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
SELF ADAPTIVE CONTROL SYSTEMS
Adaptive measurement of vigilance decrement.
p0423 A73-43211
Design analysis for reversible, self adaptive manipulator control system
p0336 N73-26083
Error analysis on manipulator activation system using reversible self adaptive control mechanism
p0336 N73-26084
One class of adaptive systems and results of computer modeling of their self instruction
p0447 N73-33056
SELF DEPLOYING SPACE STATIONS
U SPACE STATIONS
SELF ORGANIZING SYSTEMS
Automaton synthesis and perceptron learning for controlled objects classification according to unknown features, noting adaptive relationships between retina and associative elements
p0119 A73-20047
Self organized biological systems analysis, including deterministic and phenomenological selection theories, molecular level cell instructive properties and self reproducing hypercycles
p0281 A73-31825
SELF OSCILLATION
Periodic conditions in artificial-muscle autopulsators
p0244 A73-30289
SELF REGULATING
U AUTOMATIC CONTROL
SELF STIMULATION
Theoretical analysis of motivation stimulation
p0448 N73-33062
SELSYNS (TRADEMARK)
U SERVOMOTORS
SEMICIRCULAR CANALS
Semicircular canals as a primary etiological factor in motion sickness.
p0588 A73-12560
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals
p0209 A73-27718
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems
p0280 A73-31518
Endolymph fluid mechanics in semicircular canals approximated by rigid torus filled with incompressible Newtonian fluid
p0315 A73-36430
A non-Newtonian model for fluid flow in the semicircular canals.
p0315 A73-36431
Vestibular and spinal control of eye movements.
p0316 A73-36440
Physiology and dimensional analysis of semicircular canal
[AMRU-R-69-1]
p0606 N73-11058
Asymmetric response of cat semicircular canal neurons to symmetric sinusoidal rotation
[AMRU-R-69-2]
p0607 N73-11060
Physiological response of cat semicircular canal dependent units to linear acceleration without angular acceleration
[AMRU-R-70-4]
p0607 N73-11061
Effect of space flight on origin, physiological function, and amelioration of coriolis illusion in semicircular canal
[AMRU-R-70-6]
p0607 N73-11063
Response characteristics of vestibulo-ocular reflex arc
[AMRU-R-71-2]
p0608 N73-11067
Physiological factors in human oculomotor responses to space flight stress
[DR-208-VOL-1]
p0109 N73-15136
Human semicircular canal response to rotational stimuli in yaw, pitch, and roll planes of the head
p0109 N73-15137
Functional dependence of semicircular canal on physical size
p0109 N73-15139
Physiological control system for stabilization of retinal image in humans
p0110 N73-15141
Vestibular stimulation effect in human and animal retinal image stabilization
p0110 N73-15144
Clinical neurological and neurophysiological aspects of vestibulo-ocular reflex
p0110 N73-15145
Semicircular canal plugging response in cats to rotary stimulation
p0111 N73-15151
Semicircular canal model with flow visualization chamber for dynamic recording of canal fluid response to angular velocity effects
p0111 N73-15153
Determination of angular acceleration equivalent to effect of coriolis acceleration on receptors of semicircular canals
p0218 N73-20112
SEMICONDUCTOR DEVICES
NT FIELD EFFECT TRANSISTORS
NT GALLIUM ARSENIDE LASERS
NT METAL OXIDE SEMICONDUCTORS
NT TRANSISTOR AMPLIFIERS
SEMICONDUCTOR LASERS
NT GALLIUM ARSENIDE LASERS
SEMICONDUCTORS (MATERIALS)
NT METAL OXIDE SEMICONDUCTORS
SENDERS
U TRANSMITTERS

SENSATIONS
U PERCEPTION
SENSE ORGANS
NT BARORECEPTORS
NT CHEMORECEPTORS
NT COCHLEA
NT CORNEA
NT CORTI ORGAN
NT EAR
NT EARDRUMS
NT EYE (ANATOMY)
NT FOVEA
NT GRAVIRECEPTORS
NT LABYRINTH
NT MECHANORECEPTORS
NT MIDDLE EAR
NT OCULOMOTOR NERVES
NT OTOLITH ORGANS
NT PHOTORECEPTORS
NT PUPILS
NT RETINA
NT SEMICIRCULAR CANALS
NT THERMORECEPTORS
NT VESTIBULES
Orientation: Sensory basis; Proceedings of the Conference, New York, N.Y., February 8-10, 1971. p0091 A73-18030
Book - Sensory coding in the mammalian nervous system. p0199 A73-25799
SENSES
U SENSORY PERCEPTION
SENSIBILITY
U SENSITIVITY
SENSITIVITY
NT IMPACT RESISTANCE
NT LIGHT ADAPTATION
NT PAIN SENSITIVITY
NT PHOTOSENSITIVITY
NT RADIATION TOLERANCE
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions p0395 A73-42055
Evaluation of sex difference in thermal sensitivity in men and women [NASA-CR-114564] p0150 N73-17113
SENSORIMOTOR PERFORMANCE
NT PSYCHOMOTOR PERFORMANCE
NT PSYCHOSOMATICS
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion. p0044 A73-13556
Visual-motor coordination characteristics of parachute jumpers p0088 A73-17750
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision p0092 A73-18164
Structural models of simple sensory motor co-ordination. p0098 A73-18890
Disorienting effects of aircraft catapult launchings. p0117 A73-19480
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats p0118 A73-20004
Heart activity characteristics in a human operator during a control process p0164 A73-23806
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements p0168 A73-24517
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle p0170 A73-24599
Experimental study of emotional stress in operators p0193 A73-25038
Adjustment of saccade characteristics during head movements. p0201 A73-26222
Work movement performance of the astronaut in flight. p0207 A73-27645
Some aversive characteristics of centrifugally generated gravity. p0238 A73-28506
Motor functions and control of sensorial messages of somatic origin p0240 A73-29174
Anatomo-functional bases of cerebello-cerebral interrelations p0282 A73-32287
Intervention of cerebello-cortical and cortico-cerebellar paths in the organization and regulation of movement p0282 A73-32288
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention. p0283 A73-32394
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task. p0283 A73-32395
Brain alpha rhythm activity relationship to perceptual and motor performance, correlating with reaction time and computer cycle time analogy p0287 A73-33159
Information processing in the visual periphery. p0304 A73-34150
Space-time adaptation of visual position constancy. p0304 A73-34223
Central programming and peripheral feedback during eye-head coordination in monkeys. p0317 A73-36452
Interference of 'attend to and learn' tasks with tracking. p0353 A73-38377
Ultradian rhythms in human telemetered gross motor activity. p0355 A73-39102
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice. p0357 A73-39480
A study of evoked slow activities in man which follow a voluntary movement and articulated speech p0359 A73-39759
Experimental analysis of conditions for onset of emotional stress p0362 A73-39800
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli p0363 A73-39804
Sleep deprivation effects on accuracy and speed of response selection and execution. p0385 A73-40853
Variations in the motor potential with force exerted during voluntary arm movements in man. p0385 A73-41013
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair p0386 A73-41140
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior. p0387 A73-41158
Response delays and the timing of discrete motor responses. p0387 A73-41177
Russian book - Electrical activity of the human brain in the process of motor action. p0389 A73-41289
Operator reaction functional readiness manifestation in evoked potential characteristics of stimulus-response situations, obtaining response amplitude distribution p0394 A73-41891
Human sensorimotor coordination following space flights. p0397 A73-42170
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity. p0403 A73-42679

Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation p0428 A73-44550
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations p0429 A73-44673
Two components and two stages in search performance - A case study in visual search. p0435 A73-45339
Motor reaction model for hand motion in decision making manual task [AD-761518] p0370 N73-27973

SENSORY DEPRIVATION
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system. p0117 A73-19482
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells p0163 A73-23681
Effects of prolonged dark adaptation on autokinetic movement. p0202 A73-26322
Characteristics of the higher nervous activity of monkeys during a postneurotic period p0206 A73-27108
Sensory versus perceptual isolation - A comparison of their electrophysiological effects. p0247 A73-30517

SENSORY DISCRIMINATION
NT BRIGHTNESS DISCRIMINATION
NT TACTILE DISCRIMINATION
NT VISUAL DISCRIMINATION
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man. p0092 A73-18033
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination. p0153 A73-21895
Attention sharing effects on human operator performing simultaneously dynamic compensatory tracking control tasks p0602 N73-10140

SENSORY FEEDBACK
Extraretinal feedback and visual localization. p0579 A73-10437
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments p0582 A73-11445
Psychological test for relative contributions of specific and nonspecific components to intersensory transfer between vision and touch p0043 A73-13525
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion. p0044 A73-13556
Polarity cue for visual accomodation response of trained subjects to target motion direction change, considering retinal image blur and feedback relation p0129 A73-21569
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination. p0153 A73-21895
The operational control of the alpha component in the electroencephalogram by means of auditory feedback p0204 A73-26549
Forward and backward conditional link formation as physiological mechanism for reinforcement conditioning connection p0248 A73-30568
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills p0344 A73-37328
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback p0354 A73-39004

SENSORY PERCEPTION
NT AUDITORY PERCEPTION
NT AUTOKINESIS
NT CONSCIOUSNESS
NT CRITICAL FLICKER FUSION
NT EXTRASENSORY PERCEPTION
NT OLFACTORY PERCEPTION
NT PAIN SENSITIVITY
NT PROPRIOCEPTION
NT SPACE PERCEPTION
NT TACTILE DISCRIMINATION
NT TOUCH
NT VERTICAL PERCEPTION
NT VIBRATION PERCEPTION
NT VISUAL DISCRIMINATION
NT VISUAL PERCEPTION
Human thresholds for perceiving sudden changes in atmospheric pressure. p0044 A73-13554
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation. p0058 A73-15218
Human perception of humidity under four controlled conditions. p0089 A73-17864
Orientation: Sensory basis; Proceedings of the Conference, New York, N.Y., February 8-10, 1971. p0091 A73-18030
Examination of responses evoked in the sensory cortex by thalamic stimulation. p0164 A73-23772
Book - Sensory coding in the mammalian nervous system. p0199 A73-25799
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals p0209 A73-27718
Sensory versus perceptual isolation - A comparison of their electrophysiological effects. p0247 A73-30517
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test p0285 A73-33091
Participation of cholinergic mechanisms in negative human emotions p0362 A73-39799
Effects of single exposures of carbon monoxide on sensory and psychomotor response. p0383 A73-40409
Human perception of moderate strength low frequency magnetic fields tested by whole body immersion in large Helmholtz coil field under acoustic isolation p0392 A73-41789
Relation between vibratory sensibility and electric signal of living body. p0403 A73-42680
Determination of performance precision and informativeness of electronic models of the sensory system of man p0432 A73-44911
Psychophysical method of limits to evaluate experimental variables in sensory areas [AD-749334] p0100 N73-14083
Bioastronautics research, including stress effects, sensory perception, and human performance [NASA-SP-3006] p0104 N73-15091
Sensory receptors irritation and cardiopulmonary toxicity from fluorocarbon propellants [AD-751426] p0140 N73-16089
Effect of cigarette smoking on sensory perception and performance parameters of flight crews [AD-754421] p0267 N73-23071
Importance of central and peripheral vision in pattern perception p0411 N73-30063
Prosthetic limb with tactile sensing device [NASA-CASE-MFS-16570-1] p0439 N73-32013

SENSORY STIMULATION
Changes in the vibratory sensation threshold after exposure to powerful vibration. p0580 A73-10772
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man

p0046 A73-13787
Skin sensitivity of palms, wrists and forearms to focused ultrasound, noting evoked touch, pulsation, cold, warmth and prick sensations and applications in receptor physiology
p0080 A73-16695
Statistical distribution methods for analyzing formation of reflexes conditioned to time intervals between periodic unconditioned stimuli
p0093 A73-18166
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis
p0093 A73-18244
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
German monograph on human information transmission by multidimensional tactile stimuli investigation using method of learned signals identification
p0122 A73-20393
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Useful future action models of instrumental reflexes and voluntary actions based on memory role in engram storage of received stimuli
p0194 A73-25199
Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization.
p0204 A73-26749
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105
Changes in visual functions after the action of weak vestibular stimuli
p0209 A73-27719
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Alpha wave peak amplitude dependence on blocking pattern after stimulation during habituation-pseudoconditioning, conditioning and extinction
p0242 A73-29992
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Neuronal elements of the orienting response - Microrecordings and stimulation experiments in rabbits.
p0316 A73-36444
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli
p0322 A73-36577
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus
p0362 A73-39803
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli
p0363 A73-39804
Vestibular analyzer functions in dogs after prolonged ionizing irradiation
p0181 N73-19088
Use of motivational relations to find acceptor of action with conditioned stimuli
p0448 N73-33064
Various types of corticopetal influences from deep-seated emotiogenic formations of brain
p0449 N73-33068
SENTENCES
NT WORDS (LANGUAGE)
SEPARATORS
NT AIR FILTERS
NT FLUID FILTERS
SEQUENTIAL CONTROL
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills
p0344 A73-37328
Monte Carlo simulation for man machine task sequencing considering pilot performance degradation
p0270 N73-23899
SERIES (MATHEMATICS)
NT FOURIER SERIES
SEROTONIN
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat.
p0587 A73-12187
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
The role of biogenic amines in sleep.
p0051 A73-14260
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
Organic and species-related differences in the action of certain hydrazine derivatives and of aminoperhydroacridine on the oxidative deamination of serotonin
p0163 A73-23679
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Serotonin content in various parts of the brain during hibernation and awakening
p0278 A73-31390
Serotonin content variations in the fore-brain during hibernation
p0322 A73-36567
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep
p0345 A73-37394
Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle
p0064 N73-12089
SERUMS
Action of a serum protein on muscular contraction.
p0125 A73-21200
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
Blood group A sub-groups and serum cholesterol.
p0408 A73-43107
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
Stabilization methods in collecting and shipping of human sera for chemical analyses
p0143 N73-17053
SERVICE LIFE
Prediction of long-term heat-pipe performance from accelerated life tests.
p0384 A73-40438

SERVICES
NT MEDICAL SERVICES
SERVO LOOPS
U FEEDBACK CONTROL
U SERVOCONTROL
SERVOACTUATORS
U ACTUATORS
U SERVOMOTORS
SERVOCONTROL
Automated calibration of blood pressure signal conditioners. p0057 A73-14846
Servo-controlled moving stimulus generator for single unit studies in vision. p0246 A73-30401
Design and evaluation of a backhoe model with a master slave control. p0352 A73-38085
Construction of reversible self synchronous control system for manipulator p0335 N73-26080
Systems engineering for design of two dimensional automatic manipulator control system using reversible follow-up p0335 N73-26081
Remotely controlled manipulators with independent follow-up and force reproduction mechanisms p0336 N73-26082
SERVOMECHANISMS
NT SERVOMOTORS
An anthroposorphic master-slave manipulator system. p0344 A73-37316
Design of manipulator mechanisms with manual, bioelectric, and automatic control systems [NASA-TT-F-14336] p0335 N73-26073
Volumetric kinematic analysis on servomechanism of remote handling manipulator p0335 N73-26075
Remote control of underwater manipulator using cables and automatic servomechanics p0335 N73-26078
Systems engineering for design of two dimensional automatic manipulator control system using reversible follow-up p0335 N73-26081
Synchronization kinetics in control of movement links in human extremities p0336 N73-26089
SERVOMOTORS
A linear motion generator for physiological research. p0577 A73-10173
Design of automatic controlled remote arm mechanism incorporating feedback information [NASA-CR-2238] p0260 N73-22055
Construction of reversible self synchronous control system for manipulator p0335 N73-26080
SERVOSTABILITY CONTROL
U SERVOCONTROL
SET THEORY
NT THRESHOLD LOGIC
SEWAGE
Raw water sewage treatment [NASA-CASE-NPO-13224-1] p0419 N73-31011
SEX GLANDS
NT GONADS
NT TESTES
SHALES
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples. p0202 A73-26481
SHANNON INFORMATION THEORY
U INFORMATION THEORY
SHEAR FATIGUE
U SHEAR STRESS
SHEAR PROPERTIES
Experimental determination of shear moduli in a compact bone tissue p0045 A73-13742
SHEAR STRESS
NT TORSIONAL STRESS
Flow patterns and velocity and shear stress distribution downstream of steady and pulsatile flow models for fluid dynamics of blood vessel branches p0408 A73-43103
Mathematical model of collateral blood vessels caliber changes due to hydrodynamic drag /shear stress/ effects on vascular endothelium p0408 A73-43105
SHEARING STRESS
U SHEAR STRESS
SHELLS (STRUCTURAL FORMS)
NT ELASTIC SHELLS
NT LIQUID FILLED SHELLS
SHIELDING
NT RADIATION SHIELDING
NT SPACECRAFT SHIELDING
SHIPS
NT AIRCRAFT CARRIERS
NT SUBMARINES
Tasks analyses to determine technical personnel requirements for maintenance of Navy microelectronic shipboard equipment [AD-748040] p0074 N73-13123
Environmental control unit for damage control suit system for use during shipboard operations [AD-749025] p0075 N73-13125
SHOCK ABSORBERS
Biodynamic applications regarding isolation of humans from shock and vibration. p0406 A73-42926
Statistical analysis of impact injuries to seated human responding to square wave energy absorption of vertical deceleration pulse representing helicopter crash [AD-745919] p0612 N73-11102
SHOCK RESISTANCE
NT IMPACT RESISTANCE
SHOCK WAVES
NT SONIC BOOMS
Defined shock wave effects on miniature swine, describing organ injuries p0369 N73-27965
SHORT HAUL AIRCRAFT
Development of mathematical model to analyze traveler acceptance factors in short haul air carrier operations p0591 N73-10023
SHORT TAKEOFF AIRCRAFT
Analysis of passenger acceptance of commercial low-density short haul, air transportation [NASA-CR-132285] p0367 N73-27950
Analysis of human reactions to short takeoff aircraft aerodynamic noise for predicting community acceptance of short haul air service operations p0441 N73-32960
SHORT WAVE RADIATION
NT MICROWAVES
NT MILLIMETER WAVES
NT SUBMILLIMETER WAVES
SHUNTS
U CIRCUITS
SHUTTLE ORBITERS
U SPACE SHUTTLE ORBITERS
SICKNESSES
NT ALTITUDE SICKNESS
NT DECOMPRESSION SICKNESS
SIDE-LOOKING RADAR
NT RADAR IMAGERY
Training program for improving performance of operators in locating targets in side-looking airborne radar [AD-762342] p0371 N73-27979
SIGHT
U VISUAL PERCEPTION
SIGNAL ANALYSIS
Digital filters applicable to electroencephalographic pattern recognition. p0582 A73-11464
Application of frequency discrimination technique to the analysis of electroencephalographic signals. p0057 A73-15052
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures p0060 A73-15789
The explanation and investigation of biological rhythms. p0286 A73-33155
The value of data processing in the analysis of visual evoked potentials p0327 A73-36911
Signal and noise in the human oculomotor system. p0407 A73-42964

SIGNAL DETECTION
Observers detecting a signal in two multiple observation tasks. p0578 A73-10350
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions. p0578 A73-10436
Group performance in a visual signal-detection task. p0194 A73-25182
Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization. p0204 A73-26749
Visual temporal integration for threshold, signal detectability, and reaction time measures. p0235 A73-28097
Psychoacoustic theory of signal detectability based on mathematical input-output mapping model and memory role in human auditory system p0243 A73-30278
Vector correlation theory and neural mechanisms of binaural signal detection in human auditory system p0244 A73-30283
Binaural signal detection - Equalization and cancellation theory. p0244 A73-30284
Manipulating the response criterion in visual monitoring. p0247 A73-30499
Receiver operating characteristics for underwater signal detection performance of sea lions [AD-746520] p0073 N73-13113
SIGNAL DETECTORS
Visibility and optimum light characteristics of marks for sighting devices p0374 N73-29039
SIGNAL DISCRIMINATORS
U SIGNAL DETECTORS
SIGNAL ENCODING
Compact digital coding of electrocardiographic data. p0097 A73-18815
SIGNAL FLOW GRAPHS
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization. p0287 A73-33161
SIGNAL GENERATORS
Design of light modulator for generation of periodic visual stimuli [AD-754562] p0223 N73-20149
SIGNAL NOISE
U SIGNAL TO NOISE RATIOS
SIGNAL PROCESSING
New developments in EEG signal processing. p0058 A73-15279
Information processing in the visual system. p0122 A73-20374
Human visual evoked response signal decomposition by complex demodulation in terms of after-discharge time, envelope and frequency parameters p0203 A73-26497
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal p0245 A73-30387
Signal processing in medical technology p0424 A73-43317
Binaural processing of speech intelligibility in light aircraft [FAA-AM-72-31] p0102 N73-14094
SIGNAL RECEPTION
NT SYMBOLS
SIGNAL TO NOISE RATIOS
Examples for signal-noise improvement with the aid of polarity correlation analysis in the biological sector p0086 A73-17593
Manipulating the response criterion in visual monitoring. p0247 A73-30499
Signal/noise ratio in the recording of human nerve-action potentials. p0399 A73-42372
Human recognition of contrasting target in noisy environment with diversion of attention [FOA-2-C-2482-H5] p0611 N73-11092
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance p0450 N73-33631
SIGNAL TRANSMISSION
NT BIOTELEMETRY
NT DATA TRANSMISSION
NT PULSE FREQUENCY MODULATION TELEMETRY
NT RADIO TELEMETRY
NT TELEMETRY
German monograph on human information transmission by multidimensional tactile stimuli investigation using method of learned signals identification p0122 A73-20393
SIGNS (SYMBOLS)
U SYMBOLS
SIGNS AND SYMPTOMS
NT ASPHYXIA
NT BRADYCARDIA
NT LEUKOPENIA
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome. p0587 A73-12445
Semicircular canals as a primary etiological factor in motion sickness. p0588 A73-12560
Pathology of angina pectoris. p0085 A73-17276
Clinical diagnosis of angina pectoris, implicating obstructive disease of coronary arteries and effects of paroxysmal events on heart rate and blood pressure p0085 A73-17277
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris. p0085 A73-17279
Familial syndrome of midsystolic click and late systolic murmur. p0199 A73-25697
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome. p0199 A73-25698
Prophylaxis and treatment of the motion sickness syndrome p0240 A73-29410
Drug therapy for treatment of cardiogenic shock syndrome following myocardial infarction, discussing sympathomimetics, alpha-adrenergic blocks and combinations p0321 A73-36546
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture p0382 A73-40280
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity. p0424 A73-43492
Influence of infrasound on human body functions p0147 N73-17085
SILICATES
NT ARAGONITE
SILICON COMPOUNDS
NT ARAGONITE
SILTS
U SEDIMENTS
SILVER CHLORIDES
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences. p0398 A73-42179
SILVER COMPOUNDS
NT SILVER CHLORIDES
SILVER HALIDES
NT SILVER CHLORIDES
SIMICOR (IMAGE CORRELATOR)
U IMAGE CORRELATORS
SIMILARITIES
U ANALOGIES
SIMULATED ALTITUDE
Cardiopulmonary responses of male and female swine to simulated high altitude. p0432 A73-45058
SIMULATION
NT ACOUSTIC SIMULATION
NT ALTITUDE SIMULATION
NT ANALOG SIMULATION
NT COMPUTERIZED SIMULATION
NT DIGITAL SIMULATION
NT ENVIRONMENT SIMULATION

NT FLIGHT SIMULATION
NT LANDING SIMULATION
NT SPACE ENVIRONMENT SIMULATION
NT THERMAL SIMULATION
NT WEIGHTLESSNESS SIMULATION
Simulation of growth and mineral uptake by plants growing in lunar soil
[NASA-CR-134036] p0416 N73-30988
SIMULATOR TRAINING
U TRAINING SIMULATORS
SIMULATORS
NT ENVIRONMENT SIMULATORS
NT FLIGHT SIMULATORS
NT TRAINING SIMULATORS
NT VIBRATION SIMULATORS
Design and performance of breathing metabolic simulator
p0075 N73-13850
Initiator ignition effect in laboratory glass and polythene vessel studying dummy hand injuries during simulated accidents
[ERDE-TRANS-11] p0295 N73-24137
SIMULTANEOUS IMAGE CORRELATOR
U IMAGE CORRELATORS
SINKS
NT HEAT SINKS
SINUSES
NT PARANASAL SINUSES
Sinus venosus atrial septal defect - Analysis of fifty cases.
p0121 A73-20368
Pathophysiological and clinical aspects of aerosinusitus and frontal sinus hematoma formation due to barometric pressure changes from pilot case history studies
p0155 A73-22538
Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202
SITES
Atmospheric models for evaluating nuclear facility sites
[BNWL-1651-VOL-2-PT-1] p0446 N73-33044
SITTING POSITION
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
SIZE PERCEPTION
U SPACE PERCEPTION
SKELETON
U MUSCULOSKELETAL SYSTEM
SKILLS
U ABILITIES
SKIN (ANATOMY)
NT EPIDERMIS
NT EPITHELIUM
Fingerprint patterns incidence relation in congenital vitium cordis patients, using Henry dactyloscopic classification
p0581 A73-11080
Skin sensitivity of palms, wrists and forearms to focused ultrasound, noting evoked touch, pulsation, cold, warmth and prick sensations and applications in receptor physiology
p0080 A73-16695
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
An experimental basis for carcinogenic effects of ultraviolet radiation.
p0203 A73-26485
Bactericide activity of the integument of man at different times of the day
p0209 A73-27716
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145
Laser hazards and safety performance standards, discussing ocular and skin damage and exposure limits and operational regulation
p0356 A73-39205
Torsional elasticity of human skin in vivo.
p0391 A73-41625
Effect of mood on human performance, possibility of using skin analyzer for communication, and effect of prolonged exposure to depths of 160 m on mental functioning
[JPRS-57541] p0068 N73-13072
Use of skin analyzer as communication channel in controlling activity
p0069 N73-13074
Effect of protective barrier creams on toxic alkyl phosphate penetration of pig skin
[BMVG-FBWT-72-15] p0138 N73-16076
Evaluation of sex difference in thermal sensitivity in men and women
[NASA-CR-114564] p0150 N73-17113
Bactericidal activity of human skin at different times of day
p0218 N73-20110
Immunological effectiveness of X ray irradiation on histocompatibility of mice skin transplants
p0255 N73-22008
Thermal response of protective fabric/human skin system to JP-4 jet fuel fire
[AD-759525] p0337 N73-26095
Human skin reactions to lotions and distilled water during hypokinesia
p0444 N73-33034
SKIN FRICTION
NT AERODYNAMIC DRAG
Tests of fabric friction on human skin for aircrew tropical clothing comfort
[RAE-TR-72037] p0604 N73-10157
SKIN TEMPERATURE (BIOLOGY)
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Cerebral temperature oscillations and vascular responses in man
p0164 A73-23805
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors
p0199 A73-26086
Human thermoregulatory system examination under thermodynamic equilibrium based on conductive and convective metastable heat transfer from skin to environment
[ASME PAPER 73-AUT-J] p0240 A73-29414
Differential thermal sensitivity in the human skin.
p0251 A73-30912
Calculation of temperature distribution in the human body.
p0281 A73-31999
The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657
Human calorimeter with a new type of gradient layer.
p0324 A73-36662
Thermographic evaluation of relative heat loss areas of man during cold water immersion.

p0325 A73-36781
Tolerance to immersion in cold water
p0331 A73-36943
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp.
p0361 A73-39791
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
Spectral emissivity of skin and pericardium.
p0427 A73-44213
Radiation heat transmission from human underlying and surface skin effect on epidermal temperature gradient
p0428 A73-44217

SKULL
NT CRANIUM
NT INTRACRANIAL CAVITY
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672

SKY RADIATION
NT TWILIGHT GLOW

SKYLAB PROGRAM
Microbiological testing of Skylab foods.
p0205 A73-27075
Skylab astronaut vestibular function experiment in orbital flight, discussing motion sickness susceptibility, stimulation thresholds and space perception measurements
p0307 A73-34741
Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/
[ASME PAPER 73-ENAS-26] p0350 A73-37981
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
Trash management during Skylab and long duration missions with compactors, autoclaves, biocides and isotope powered water recovery/waste management systems
[ASME PAPER 73-ENAS-31] p0351 A73-37986
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Skylab medical experiments altitude test /SMEAT/ chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992
Astronaut manual performance limits in intravehicular Skylab environment
[NASA-CR-128590] p0603 N73-10150
Dermatological testing of personal hygiene cleansing agents and laundry detergents for possible use in Skylab Program
[NASA-CR-128880] p0222 N73-20143
Space rations and menus developed for Skylab missions
[NASA-CR-128910] p0268 N73-23080
Data analysis for predicting human personal hygienic needs during long term space flight
[NASA-CR-128929] p0295 N73-24132

SLANT PERCEPTION
U SPACE PERCEPTION

SLEEP
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior
p0051 A73-14259
The role of biogenic amines in sleep.
p0051 A73-14260
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263
Patterns of reflex excitability during the ontogenesis of sleep and wakefulness.
p0052 A73-14264
Rapid eye movement state beneficial effects on memory refuted in favor of delta wave slumber, emphasizing stage 4 sleep
p0093 A73-18225
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
Non-Gaussian properties of the EEG during sleep.
p0126 A73-21465
Alpha-delta sleep as replacement for delta sleep in various psychiatric patients with chronic fatigue and depression
p0156 A73-22694
Rapid eye movement analyzer.
p0156 A73-22697
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
A vecto-oculographic approach to fast sleep eye movements in man.
p0242 A73-29994
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
Memory fixation during sleep, discussing EEG, EOG, EMG and ECG recordings for differences between light and paradoxal sleep
p0280 A73-31749
Sleep behaviour as a biorhythm.
p0286 A73-33158
Investigation of the possibility of human adaptation to a 16-hour day
p0305 A73-34238
Sonic booms and sleep - Affect change as a function of age.
p0324 A73-36780
Further sleep problems in airline pilots on world-wide schedules.
p0326 A73-36792
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Similarities and differences concerning the sleep of two baboons, Papio hamadryas and Papio papio
p0359 A73-39764
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718
Application of factor analysis to the encephalographic characterization of sleep
p0430 A73-44722
Sleep stage classification analysis on heart rate data recordings
[AD-740946] p0605 N73-10167
Vestibulo-ocular response of man to oscillatory rotation during sleep
[AMRU-R-70-3] p0608 N73-11066

Diurnal changes in human histamine and serotonin metabolism and effects of work-sleep cycle
p0064 N73-12089
Activity cycle data for spacecrews of Soyuz 3 to 9 spacecrafts before, during and after space flights
[JPRS-58173] p0137 N73-16068
Electrophysiological sleep patterns of human and animal brains
[NASA-TT-F-740] p0257 N73-22023
Electropolygraphic analyses of sleep patterns in humans with neurological disorders
p0257 N73-22024
Neurophysiology of sleep and wakefulness in fish, amphibians, birds, and reptiles
p0257 N73-22025
Bioelectrical activity differentiations in cat cortex during sleep inhibition
p0257 N73-22026
Interdependence of slow and rapid brain waves during sleep
p0257 N73-22027
Neuronal changes in cortical motor region cells during pharmacological induced sleep
p0257 N73-22028
Somnofunctional mapping of deep brain waves in neurological patients
p0257 N73-22029
Thalamic cat cell activities during sleep and wakefulness phases
p0257 N73-22030
Bioelectric activity and excitability of cat brain structures during sleep phases
p0257 N73-22031
Bioelectric activity changes in brains of sleeping children caused by aging factor
p0257 N73-22032
Statistical analysis of effect of simulated sonic booms on sleep patterns of male subjects
[FAA-AM-72-35] p0333 N73-26057
Electroencephalographic and behavioral responses of humans to aircraft noise during sleep
[NASA-CR-2279] p0338 N73-27058
Human body temperature dynamics in adaptation to changed work-sleep cycles
p0373 N73-29036
Rhythm disturbances in sleep and wakefulness cycles of Soyuz 3 and 9 crews before, during, and after space flight
[NASA-TT-F-15103] p0375 N73-29048
Effect of simulated sonic booms and overpressure on EEG waveform patterns and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
Circadian rhythms of sleep and cerebral temperature in rats chronically exposed to hot environments
[NASA-TT-F-15082] p0417 N73-30994

SLEEP DEPRIVATION
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
Wakefulness and sleep states in developing organism, discussing REM sleep deprivation effects on behavior, brain excitability, pharmacology and biochemistry
p0052 A73-14265
Effects of 24-hour sleep deprivation on rate of decrement in a 10-minute auditory reaction time task.
p0058 A73-15220
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
Effects of aircraft noise on human sleep.
p0096 A73-18546
Lone woman pilot sleep patterns and sleep disruptions on global flight across time zones
p0307 A73-34745
Gaze-positioning eye movement perturbations during somnolence states
p0332 A73-36950
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep
p0345 A73-37394
Sleep loss in air cabin crew.
p0355 A73-39109
Sleep deprivation effects on accuracy and speed of response selection and execution.
p0385 A73-40853
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073
Diurnal dynamics of psychic performance during 72-hour continuous wakefulness
p0135 N73-16056
Pilot performance and sleep patterns in long duration flights and control of hypnotic drug and alcohol use
p0226 N73-21107
Physiological aspects of sleep induction in aircrews after prolonged flight times
p0227 N73-21108
Effects of work-rest schedules, circadian rhythms, continuous work, and sleep loss on sustained performance
p0271 N73-23988
Biological effects of sleep deprivation, and effects of prolonged work on performance under combat conditions
p0271 N73-23989
Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks
[OES-8/72] p0421 N73-31024
Sleep deprivation effects on accuracy and speed of response selection and execution
p0422 N73-31854
Physiological effects on highly trained subjects when confined to bed, deprived of sleep, or allowed to discontinue training
[NASA-CR-134044] p0438 N73-32008

SMALLPOX
Air-transport, a main cause of smallpox epidemics today.
p0326 A73-36791

SMELL
U OLFACTORY PERCEPTION

SMOKE
Influence of altitude and drugs on cerebral circulation in smokers and non-smokers
p0229 N73-21125

SMOOTHING
NT DATA SMOOTHING

SNOW COVER
Problems related to high-performance flight in the Arctic regions
p0332 A73-36953

SOAPS
Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/
[ASME PAPER 73-ENAS-26] p0350 A73-37981
Dermatological testing of personal hygiene cleansing agents and laundry detergents for possible use in Skylab Program
[NASA-CR-128880] p0222 N73-20143

SOCIAL FACTORS
Differential housing /isolation vs aggregation/ as factor in postnatal development of mouse brain cell specificity and metabolism, noting relation to sleep behavior
p0051 A73-14259
Astronauts diurnal life cycle inversion during space flight missions, considering social factors and work-rest cycle effects
p0208 A73-27715
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Myocardial infarction susceptibility correlated with psychosocial factors in life change measurement studies
p0405 A73-42833
Evolution of man-machine-hybrid integration in evolving social structure
[AMRU-R-68-3] p0608 N73-11069
Human performance in schematic concept formation as a function of socio-economic level, personality, intelligence, and race
[AD-744781] p0260 N73-22052

Relations between sociometric variables and criteria of ability and behavior of student pilots p0367 N73-27954

SOCIAL ISOLATION

Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues p0314 A73-35983

Composition of human gastrointestinal microflora during prolonged isolation p0373 N73-29037

SOCIOLOGY

NT SOCIAL FACTORS

Philosophical and social psychological study of Apollo moon scientist [NASA-CR-130832] p0176 N73-18122

SODIUM

NT SODIUM 24

Renal vascular response to saline infusion from radioactive Xe washout and sodium excretion concentration data p0577 A73-10170

Effect of hypothermia on renal sodium reabsorption. p0391 A73-41623

High intensity noise effects on urinary K-Na ratios in rats p0371 N73-29018

SODIUM CARBONATES

Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness p0124 A73-20990

Effectiveness of sodium hydrocarbonate as means for treating and preventing motion sickness p0135 N73-16057

SODIUM CHLORIDES

A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans. p0045 A73-13598

Effect of iron and salt on prodigiosin synthesis in Serratia marcescens. p0306 A73-34399

Effect of prior adaptation to cold on the development of experimental hypertonia p0381 A73-40209

Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature. p0390 A73-41438

Fever generation in rabbits by intravenous injection of table salt [NASA-TT-F-14677] p0136 N73-16063

SODIUM COMPOUNDS

NT SODIUM CARBONATES

NT SODIUM CHLORIDES

SODIUM ISOTOPES

NT SODIUM 24

SODIUM 24

Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands. p0348 A73-37757

SOFTWARE (COMPUTERS)

U COMPUTER PROGRAMS

SOIL SCIENCE

Resistance of soil microorganisms to starvation. p0589 A73-12627

Survival of Arthrobacter crystallopoietes during prolonged periods of extreme desiccation. p0119 A73-20026

Responses of indigenous microorganisms to soil incubation as viewed by transmission electron microscopy of cell thin sections. p0241 A73-29724

Survival of soil bacteria during prolonged desiccation. p0251 A73-30959

Soil microbiological tests to evaluate Antarctica as Mars environment model for quarantine standards p0396 A73-42162

SOILS

NT LUNAR DUST

NT LUNAR SOIL

NT MUD

Procedure for assaying enzyme activity in soils and application to presumptive life tests in Martian soil [NASA-CR-128399] p0591 N73-10059

Soil sampling and microorganism analysis in planetary spacecraft assembly area for prevention of Mars contamination [NASA-CR-130009] p0135 N73-16059

Psychrophilic organisms in soil samples of areas for Viking spacecraft assembly [REPT-2] p0333 N73-26063

Use of soil-vegetation system brightness coefficients to measure vegetation quantity and crop yield p0378 N73-29334

SOLAR ACTIVITY

NT SOLAR FLARES

Identification and adjustment of psychological factors to improve solar patrol observing. p0057 A73-14841

SOLAR FLARES

Solar flare frequency and associated physical phenomena diversity, discussing earth atmosphere protective effects and impact on Concorde flights p0115 A73-19210

Geomagnetic latitude variation of cosmic radiation rates measured onboard Concorde SST prototypes, investigating solar flares p0204 A73-26588

Improved performance of visual perception of solar patrol observers monitoring sun activity [AD-760802] p0377 N73-29063

SOLAR OBSERVATORIES

Identification and adjustment of psychological factors to improve solar patrol observing. p0057 A73-14841

SOLAR PLASMA (RADIATION)

U SOLAR WIND

SOLAR RADIATION

NT SOLAR WIND

Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress p0291 N73-24106

Effects of solar radiation on photomorphogenesis of plants based on spectral distribution of solar energy in daytime p0378 N73-29322

Effects of radiation and heat balance of active surface on life processes of plants with emphasis on productivity of cotton p0378 N73-29323

Solar radiation effects on photosynthesis of submerged aquatic plants p0378 N73-29327

Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat p0378 N73-29335

SOLAR RADIATION OBSERVATION

U SOLAR RADIATION

SOLAR SYSTEM

Solar system other planets suitability for terrestrial organisms, noting life forms possible existence on Venus, Mars and Jupiter p0094 A73-18349

Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc p0345 A73-37398

SOLAR WIND

Biogenic elemental distribution and isotopic abundance in lunar samples, discussing heavy isotopes enrichment by solar wind irradiation, meteorite impacts and hydrogen stripping p0095 A73-18417

SOLID ROTATION

U ROTATING BODIES

SOLID STATE DEVICES

NT FIELD EFFECT TRANSISTORS

NT GALLIUM ARSENIDE LASERS

NT METAL OXIDE SEMICONDUCTORS

NT TRANSISTOR AMPLIFIERS

Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences. p0398 A73-42179

SOLID STATE LASERS

NT GALLIUM ARSENIDE LASERS

SOLUTIONS

NT AQUEOUS SOLUTIONS

NT GAS MIXTURES

NT NUCLEAR EMULSIONS
SOLVENT EXTRACTION
Quantitative evaluation of superficial organic contaminants, soluble in halogenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis
p0096 A73-18547
SOLVENTS
Solvent effects on enzymes - Implications for extraterrestrial life.
p0091 A73-17948
SONAR
Physiological effects of 12 submarine personnel during prolonged exposure to sonar signals at 85 db (five day exposure)
[AD-744938] p0594 N73-10087
Human tolerance and adaptation in long term exposure to sonar signals at elevated intensities
[AD-746103] p0611 N73-11089
Decision making behavior of sonar operator in target detection and reporting
[AD-750761] p0114 N73-15174
SONIC BOOMS
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
Effects of aircraft noise on human sleep.
p0096 A73-18546
Human response to transportation noise and vibration.
p0310 A73-35328
Sonic booms and sleep - Affect change as a function of age.
p0324 A73-36780
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Sonic boom effects on individuals compensatory tracking performance for unstable system
[UTIAS-TN-179] p0612 N73-11098
Effect of sonic boom on fish and fish eggs during developmental stage
[FAA-RD-73-29] p0219 N73-20121
Research in aircraft noise and sonic booms reduction, remote sensing of water pollution, and earth surface changes
[DLR-MITT-72-15] p0232 N73-21153
Statistical analysis of effect of simulated sonic booms on sleep patterns of male subjects
[FAA-AM-72-35] p0333 N73-26057
Lesion threshold in guinea pig auditory sensation areas due to sonic booms
[ISL-33/72] p0369 N73-27966
Effect of simulated sonic booms and overpressure on EEG waveform patterns and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
SORBENTS
NT ABSORBENTS
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
Bactericidal properties of sorbents in spacecraft water regeneration system
p0374 N73-29038
Regenerable CO2 sorbent formulation and fabrication for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
SORPTION
NT ADSORPTION
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials
p0087 A73-17681
Systems design for amine carbon dioxide sorber bed to be used in manned spacecraft
[NASA-CR-111849] p0420 N73-31018
SORTIE CAN
U SPACELAB
SORTIE LAB
U SPACELAB
SORTING
U CLASSIFYING
SOUND
U ACOUSTICS
SOUND DETECTORS
U SOUND TRANSDUCERS
SOUND FIELDS
Binaural acoustic field sampling, head movement and echo effect in auditory localization of sound sources position, distance and orientation
p0244 A73-30282
SOUND INTENSITY
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790
Pure-tone equal-loudness contours for standard tones of different frequencies.
p0387 A73-41176
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248
SOUND LOCALIZATION
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
Problem of localization in the median plane - Effect of pinnae cavity occlusion.
p0193 A73-24976
German monograph - Investigations regarding auditory depth perception and the problem of in-head localization of acoustic events.
p0240 A73-29278
Binaural acoustic field sampling, head movement and echo effect in auditory localization of sound sources position, distance and orientation
p0244 A73-30282
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
SOUND MEASUREMENT
U ACOUSTIC MEASUREMENTS
SOUND PERCEPTION
U AUDITORY PERCEPTION
SOUND PROPAGATION
NT VOICE
SOUND TRANSDUCERS
NT ELECTROACOUSTIC TRANSDUCERS
NT LOUDSPEAKERS
NT MICROPHONES
Design and performance of strain gage transducer as blood pressure recording device
p0231 N73-21144
SOUND WAVES
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT NOISE (SOUND)
NT SONIC BOOMS
Psychophysical analysis of RF sound perception in human subjects
[AD-747684] p0099 N73-14076
SOUTHERN HEMISPHERE
NT ANTARCTIC REGIONS
SOVIET UNION
U U.S.S.R.
SOYBEANS
Remote detection of water content and spectral properties of leaves in different soybean crop species
p0068 N73-13070
SOYUZ SPACECRAFT
Activity cycle data for spacecrews of Soyuz 3 to 9

spacecrafts before, during and after space flights
[JPRS-58173] p0137 N73-16068
Morphological composition of peripheral blood of crew members of Soyuz-9 and Salyut-1
p0217 N73-20104
Rhythm disturbances in sleep and wakefulness cycles of Soyuz 3 and 9 crews before, during, and after space flight
[NASA-TT-F-15103] p0375 N73-29048

SPACE BIOLOGY
U EXOBIOLOGY

SPACE CAPSULES
Electrochemical process for recovery of oxygen from atmospheres of manned space capsules
[NASA-CR-114573] p0300 N73-25130

SPACE ENVIRONMENT
U AEROSPACE ENVIRONMENTS

SPACE ENVIRONMENT SIMULATION
NT WEIGHTLESSNESS SIMULATION
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
Skylab medical experiments altitude test /SMEAT/ chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485
Developments in the analysis of planetary quarantine requirements.
p0395 A73-42159
Human physiological and psychological responses in long time exposure to simulated space station atmosphere as observed by critical tracking task
p0601 N73-10133
Experiments and simulations to determine effect of compliance and force feedback on manipulator performance
[NASA-CR-128605] p0603 N73-10151
Hypodynamia effect on human transverse acceleration tolerance
p0181 N73-19083
Microorganism survival in simulated Mars environment
p0185 N73-19116
Microbiological investigation of neutral buoyancy simulator for weightless space environment testing
[NASA-TM-X-64736] p0229 N73-21127
Human visual/motor response to tracking task during long term confinement in simulated space station
[NASA-CR-2240] p0295 N73-24134
Screw calculus in kinematic and power analyses on spatial positions of manipulator link mechanisms
p0336 N73-26092

SPACE EXPLORATION
NT VIKING MARS PROGRAM
Space exploration and the origin of life.
p0090 A73-17930
Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc
p0345 A73-37398
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478

SPACE FLIGHT
NT APOLLO FLIGHTS
NT APOLLO 11 FLIGHT
NT APOLLO 12 FLIGHT
NT APOLLO 14 FLIGHT
NT APOLLO 15 FLIGHT
NT APOLLO 16 FLIGHT
NT APOLLO 17 FLIGHT
NT INTERPLANETARY FLIGHT
NT MANNED SPACE FLIGHT
NT VIKING MARS PROGRAM
Russian book - Biomedical problems of space flights: Index of domestic and foreign literature.
p0062 A73-16034
Visual perception during space flight
p0105 N73-15104
Vestibular neuron response to rotational stimuli in space flight environment
p0111 N73-15150
Effects of ionizing radiation and space flight conditions on microorganisms, plants, animals, enzymes, and immunological preparations
p0173 N73-18103
Functional morphology of various organs and tissues subjected to space flight
[NASA-TT-F-738] p0185 N73-19126
Medical biological and other problems of space flight
[JPRS-58678] p0224 N73-21089
Review of bibliography on medical and biological research during space flights
p0224 N73-21091
Contamination radiation safety during space flight, and safety problems at launch
[JPRS-58781] p0232 N73-21149
BIOSTACK experiment on Apollo 16 for studying combined action of heavy high energy loss nuclei and space flight factors on resting biological systems
p0266 N73-23062
Scheduling of work-rest cycle for cosmonauts during space flights
p0416 N73-30984

SPACE FLIGHT FEEDING
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs
p0056 A73-14168
Microbiological testing of Skylab foods.
p0205 A73-27075
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet.
p0355 A73-39103
Nutrition systems for pressure suits.
p0355 A73-39105
Analysis of nutrient intake and absorption during Apollo 16 flight
[NASA-TM-X-58096] p0067 N73-12110
Space rations and menus developed for Skylab missions
[NASA-CR-128910] p0268 N73-23080

SPACE FLIGHT STRESS
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
Emotional stresses during a space flight
p0116 A73-19297
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Work movement performance of the astronaut in flight.
p0207 A73-27645
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
International literature survey of microbiological space research for 1930-1970, discussing high altitude balloon, rocket and satellite experiments, weightlessness effects, mutagenesis, etc
p0279 A73-31501
Asymmetry of otolith responses in fish
p0279 A73-31507
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Skylab astronaut vestibular function experiment in orbital flight, discussing motion sickness

susceptibility, stimulation thresholds and space perception measurements
p0307 A73-34741
Physiological effects of acceleration and weightlessness during space flight, discussing cardiovascular system, renal function, respiration, blood volume, metabolism, work capacity, etc
[AFOSR-72-2451TR] p0312 A73-35856
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Prolonged space flight and hypokinesia.
p0325 A73-36789
Effect of certain flight factors on crew efficiency
p0383 A73-40350
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Human sensorimotor coordination following space flights.
p0397 A73-42170
Free fall effects on differential growth and radiation sensitivity of higher plants in space flight and ground based clinostat experiments
p0397 A73-42172
Space flight factors effects on Drosophila development in terms of dominant, autosomal and sex-linked recessive lethals frequency, noting gametogenesis stage sensitivity
p0397 A73-42173
Apollo 16 flight program for investigating physiological effects of prolonged weightlessness on central nervous system, vestibular, neuromuscular and cardiovascular functions, metabolism, radiation sensitivity and body weight
p0398 A73-42176
Dynamic changes in psychophysiological motor efficiency of cosmonauts in flight
[JPRS-57417] p0602 N73-10144
Effect of space flight on origin, physiological function, and amelioration of coriolis illusion in semicircular canal
[AMRU-R-70-6] p0607 N73-11063
Analysis of cosmonaut emotional stress as determined by physiological and behavioral responses
[NASA-TT-F-14654] p0067 N73-12113
Regulation of vertical posture after Soyuz 6, 7, and 8 flights and after 120-day bed rest experiment
p0134 N73-16052
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093] p0173 N73-18104
Measurements of endocrine metabolic responses to space flight stress on Apollo 14 and Apollo 15 crewmen
p0173 N73-18105
Measurement of antidiuretic hormone excretions in human urine as indication of neurosecretory stress response during space flight
p0174 N73-18108
Human adrenocorticotropin level measurements as indication of adaptation to space flight stress
p0174 N73-18109
Pharmacological measures for prophylactic and restorative treatment of men and animals during space flight
p0212 N73-20060
Scientific and engineering studies for Physiology of Chimpanzees in Orbit Program
[NASA-CR-131374] p0220 N73-20129
Physiological stress effects of space flight on human body
[JPRS-57139] p0254 N73-22002
Research activities in exobiology and aerospace medicine
[JPRS-59015] p0262 N73-23024
Conference on Apollo 16 experiment for measuring microbial response to space environment
[NASA-TM-X-58103] p0291 N73-24102
Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress
p0291 N73-24106
Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores
p0291 N73-24108
Phytological and physiological problems caused by rest-work cycles of cosmonauts during space flight
[NASA-TT-F-14990] p0336 N73-26093
Human hydroxycorticosteroid and aldosterone excretions during hypodynamic space flight conditions
p0373 N73-29031
Rhythm disturbances in sleep and wakefulness cycles of Soyuz 3 and 9 crews before, during, and after space flight
[NASA-TT-F-15103] p0375 N73-29048

SPACE LABORATORIES
NT MANNED ORBITAL LABORATORIES

SPACE LAW
Russian papers on populated cosmos covering space exploration impact on human civilization, extraterrestrial life, space medicine and biology, solar system, space law, etc
p0345 A73-37398

SPACE MISSIONS
Psychological and psychophysiological factors of human performance in manned space missions, considering environmental effects of space flight and man-machine system
p0089 A73-17775
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990
Control and display sequences for four space shuttle orbiter mission phases - Vol. 4
[NASA-CR-128579] p0603 N73-10148

SPACE PERCEPTION
NT AUTOKINESIS
Some differences among figural aftereffects, apparent motion, and paracontrast.
p0578 A73-10435
Influence of border and background on perception of straightness.
p0585 A73-12081
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Verbal estimates of perceived time of flashing lights interval, relating to lights separation distance
p0044 A73-13552
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556
Tests for binocular rivalry of light contours for detection of randomness in disappearance patterns
p0044 A73-13557
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection
p0046 A73-13762
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219
Mathematical models for distance perception of earth surface features observed from ascending vehicle, considering convergence, accommodation and monocular parallax mechanisms
p0060 A73-15785
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception
p0061 A73-15796
Visibility, resolution and spatial acuities in terms of target-background contrast, diffraction, luminance, stimuli wavelength and anatomical variations effects on retinal images
p0079 A73-16477
Monocular and binocular clues interaction in depth perception and spatial orientation, discussing

stereopsis testing
p0079 A73-16483
Ophthalmological assessment of visual functional impairment due to glare, stimulus motion and aging changes
p0080 A73-16485
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent.
p0085 A73-17199
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
Sensory, learned, and cognitive mechanisms of size perception.
p0091 A73-18031
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli
p0096 A73-18624
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485
Psychophysical areal summation and stimulus contour and threshold visibility effects on size selective adaptation in human vision for single- and multichannel models
p0128 A73-21563
Human retina-patterned ideal perceiving machine to calculate visual acuities for spatial arrangement in line figures
p0129 A73-21564
Polarity cue for visual accomodation response of trained subjects to target motion direction change, considering retinal image blur and feedback relation
p0129 A73-21569
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity.
p0153 A73-21897
Spatial analysis in monkeys of various ages after extirpation of the parietal areas of the cerebral cortex
p0167 A73-24329
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
Possible stimulus hypothesis and visual space perception.
p0202 A73-26321
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716
Tachistoscopically measured independent image size and visual field recognition capacities of human eye
p0206 A73-27109
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094
Absolute motion parallax and the specific distance tendency.
p0234 A73-28096
Scalar perceptions with binocular cues of distance.
p0235 A73-28176
Properties of human visual orientation detectors - A new approach using patterned afterimages.

p0239 A73-29124
German monograph - Investigations regarding auditory depth perception and the problem of in-head localization of acoustic events.
p0240 A73-29278
The Mach-Dvorak phenomenon and binocular fusion of moving stimuli.
p0245 A73-30392
Space-time adaptation of visual position constancy.
p0304 A73-34223
Stereoscopic depth aftereffects with random-dot patterns.
p0308 A73-34841
Temporal factors of movements in visual aftereffects
p0308 A73-34843
Movement perception during voluntary saccadic eye movements.
p0308 A73-34845
Book - The psychology of visual perception.
p0310 A73-35474
Distance perception and the ambiguity of visual stimulation - A theoretical note.
p0311 A73-35492
Influence of stimulus symmetry on visual scanning patterns.
p0311 A73-35494
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454
Ambivalent optokinetic stimulation and motion detection.
p0318 A73-36458
Visual-vestibular interaction and motion perception.
p0318 A73-36460
Scanning movements in space perception in terms of convergence role during cue conflict and cue isolation experiments
p0318 A73-36462
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463
Problems related to high-performance flight in the Arctic regions
p0332 A73-36953
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
Aircraft pilot spatial disorientation and illusory perceptual break-off sensations during flight associated with minor vestibular asymmetry
p0356 A73-39111
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112
Disparity detectors in human depth perception - Evidence for directional selectivity.
p0383 A73-40413
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
Compensating for distortion in viewing pictures obliquely.
p0387 A73-41178
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180
Sufficient conditions for the discrimination of motion.
p0388 A73-41181

Reaction times for focal and nonfocal /peripheral/ processing of simultaneously presented color and form stimuli
p0388 A73-41182
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
Comparison of tilt and displacement adaptation in visual perception, establishing qualitative differences by interocular transformation magnitude and exposure time methods
p0388 A73-41188
Effect of lateral body tilts and visual frames on perception of the apparent vertical.
p0392 A73-41736
Visual perception of relative object dimension during monocular and binocular rod equalization experiment in various visual field restriction conditions, recording eye movements and focusing characteristics
p0394 A73-41890
Optimal input rates for tilt adaptation.
p0401 A73-42500
Stimulus specificity in the human visual system.
p0407 A73-42960
Mathematical model for physical space transformation into subjective field metric for monocular vision
p0432 A73-44906
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912
Visual evoked potentials to changes in the motion of a patterned field.
p0435 A73-45167
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Bayesian model for stimuli processing in visual space perception
p0600 N73-10127
Operator visual perception mapping during parameter adjustment in dynamic control system
p0600 N73-10129
Measurements of automobile driver response functions in simulated steering control task with visual field display
p0600 N73-10130
Motion cue effects on pilot manual control tracking task
p0602 N73-10141
Training procedure for improving divers distance estimation ability in clear and turbid water
[AD-752976] p0187 N73-19140
Improving distance under water and long-term effectiveness of training
[AD-752979] p0299 N73-25128
Differences in speed of mentally processing displays containing information about right and left
[AD-759723] p0334 N73-26070
Factors affecting stereoscopic vision and depth perception in human beings
[AD-759261] p0375 N73-29050

SPACE PROBES
NT LUNIK 16 LUNAR PROBE
NT VIKING MARS PROGRAM

SPACE PROGRAMS
NT APOLLO PROJECT
NT TEKTITE PROJECT

SPACE RADIATION
U EXTRATERRESTRIAL RADIATION

SPACE RATIONS
Space rations and menus developed for Skylab missions
[NASA-CR-128910] p0268 N73-23080

SPACE RENDEZVOUS
NT ORBITAL RENDEZVOUS

SPACE SCIENCES
U AEROSPACE SCIENCES

SPACE SHUTTLE ORBITERS
Space Shuttle Orbiter Environmental Control and Life Support System for atmosphere revitalization, crew life support, thermal conditioning and airlock support
[ASME PAPER 73-ENAS-23] p0350 A73-37979
Utilization of simplified man machine interface concept to manage and control complex space system involving multiple redundant computers that control multiple redundant systems - Vol. 1
[NASA-CR-128576] p0603 N73-10145
Space shuttle orbiter subsystems and control and display data required for crew operations - Vol. 2
[NASA-CR-128577] p0603 N73-10146
Space shuttle orbiter subsystems, formats and format trees, and coding of sample format - Vol. 3
[NASA-CR-128578] p0603 N73-10147
Control and display sequences for four space shuttle orbiter mission phases - Vol. 4
[NASA-CR-128579] p0603 N73-10148
Habitability study of shuttle orbiter
[NASA-CR-128863] p0190 N73-19162
Habitability study of shuttle orbiter
[NASA-CR-128864] p0190 N73-19163

SPACE SHUTTLES
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle.
[ASME PAPER 73-ENAS-42] p0351 A73-37989
Conceptual designs of versatile EVA work-stations - Vol. 2
[NASA-CR-128927] p0268 N73-23082
Storage stability of intermediate moisture foods for space shuttle
[NASA-CR-133978] p0366 N73-27944
Equipment requirements for space shuttle EVA/IVA pressure suit, life support system, mobility aids, vehicle support provisions, and emergency support
[NASA-CR-133991] p0414 N73-30089
Space shuttle environmental and thermal control/life support system
[NASA-CR-134009] p0415 N73-30091
Guidelines for extravehicular and intravehicular activities during space shuttle operation with emphasis on contingency situations - Vol. 2
[NASA-CR-133992] p0419 N73-31007
Pressure suit requirements and characteristics for space shuttle personnel performing EVA and IVA activities - Vol. 3
[NASA-CR-133993] p0419 N73-31008
Requirements for mobility aids and restraint devices for use by personnel of space shuttle - Vol. 4
[NASA-CR-133994] p0419 N73-31009
Requirements and equipment for space shuttle emergency intravehicular activity and effectiveness of emergency procedures - Vol. 5
[NASA-CR-133995] p0419 N73-31010

SPACE STATIONS
NT ORBITAL SPACE STATIONS
NT SALYUT SPACE STATION
Long-term testing of water electrolysis systems for regenerative life support system in manned space stations
[NASA-CR-128629] p0612 N73-11095
Conceptual designs of versatile EVA work-stations - Vol. 2
[NASA-CR-128927] p0268 N73-23082
Physical and biomedical research by earth orbiting space stations
[AD-756771] p0294 N73-24126
Design, fabrication and acceptance testing of zero gravity whole body shower
[NASA-CR-134066] p0420 N73-31019

SPACE SUITS
Mercury, Gemini and Apollo space suits, discussing glove development, boot design, portable life support equipment and extravehicular mobility
p0289 A73-34025
Performance of prototype high pressure space suit glove
[NASA-CR-114532] p0112 N73-15162
Development of prototype high pressure space suit glove assembly
[NASA-CR-114535] p0151 N73-17120
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125
Automatic temperature controller for liquid cooled garment based on total evaporative water loss during exercise
[NASA-TN-D-7311] p0299 N73-25126
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] p0334 N73-26071

Design, development, and fabrication of liquid cooled space suit using ice pack heat sink - Vol. 1
[NASA-CR-114624-VOL-1] p0419 N73-31006
Cooling effects on human tolerance to work induced heat stress and collapse
[NASA-CR-134059] p0438 N73-32005
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] p0439 N73-32012
SPACE SYSTEMS ENGINEERING
U AEROSPACE ENGINEERING
SPACE VEHICLE CONTROL
U SPACECRAFT CONTROL
SPACE VEHICLES
U SPACECRAFT
SPACECRAFT
Research in aerospace, biological, and solar sciences
[AD-746143] p0609 N73-11080
SPACECRAFT CABIN ATMOSPHERES
Microflora of a sealed cabin with human subjects in a 3-day experiment with reduced temperature and high relative humidity
p0088 A73-17697
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Aerogenic microbial contamination of manned pressurized cabin atmosphere at reduced temperature and high humidity
p0065 N73-12098
Design and performance of prototype nitrogen/oxygen supply unit using water/hydrazine electrolysis to provide cabin leakage makeup in manned spacecraft
[NASA-CR-128688] p0112 N73-15159
Environmental health measures to prevent cabin atmosphere toxicity and provide drinking water standards in manned space flight applications
p0144 N73-17058
Toxicity of atmospheric dichloromethane levels in simulated space cabin atmosphere on dogs, rats, mice, and monkeys
[NASA-TM-X-69099] p0177 N73-18129
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Oxidation of atmospheric impurities in space cabin and purity of reclamated water
p0183 N73-19104
Temperature and humidity control in air quality modeling for optimal life support system of spacecraft cabin
p0294 N73-24131
Electrochemical process for recovery of oxygen from atmospheres of manned space capsules
[NASA-CR-114573] p0300 N73-25130
SPACECRAFT CABINS
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
Interrelationship and reaction of human subjects to spacecraft cabin environment
[NASA-TT-F-15020] p0374 N73-29041
SPACECRAFT COMPONENTS
NT COMMAND MODULES
NT SPACECRAFT CABINS
Microbiological assay procedures for spacecraft cabling, antennas, solar panels, and thermal blankets
[NASA-CR-130383] p0149 N73-17109
Control equipment for sterilization facility used to thermally inactivate microbes on interplanetary space vehicle components
[NASA-CR-131103] p0185 N73-19122
Dry heat inactivation of atypical Bacillus subtilis var. niger spores in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
Biodetection grinder for sampling aerospace materials for microorganisms
[NASA-TM-X-64765] p0376 N73-29059
SPACECRAFT CONTAMINATION
Design principles for contamination abatement in scientific satellites.
p0584 A73-11991
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Ten years of development of the Planetary Quarantine Program of the United States.
p0313 A73-35966
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987
Microbial contamination of water - Traditional and space-age problems and approaches.
[ASME PAPER 73-ENAS-33] p0351 A73-37988
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161
Aerogenic microbial contamination of manned pressurized cabin atmosphere at reduced temperature and high humidity
p0065 N73-12098
Development of procedures of identification of microorganisms on orbiting spacecraft
[NASA-CR-128747] p0186 N73-19132
Psychrophilic organisms in soil samples of areas for Viking spacecraft assembly
[REPT-2] p0333 N73-26063
Thermal stress and mechanical shock effects on release of bacterial spores from stainless steel surfaces with application to Mars landing
[NASA-CR-133868] p0416 N73-30987
SPACECRAFT CONTROL
Quality /probability/ evaluation of human operator ergatic processes controlling spacecraft during rendezvous and docking with orbital station
p0087 A73-17686
Work movement performance of the astronaut in flight.
p0207 A73-27645
Utilization of simplified man machine interface concept to manage and control complex space system involving multiple redundant computers that control multiple redundant systems - Vol. 1
[NASA-CR-128576] p0603 N73-10145
Space shuttle orbiter subsystems and control and display data required for crew operations - Vol. 2
[NASA-CR-128577] p0603 N73-10146
Control and display sequences for four space shuttle orbiter mission phases - Vol. 4
[NASA-CR-128579] p0603 N73-10148
Reliability probability analysis on ergatic process in spacecraft control during approach and docking with orbital station
p0064 N73-12087
Role of cosmonaut in spacecraft control
p0178 N73-18137
Mathematical models for human performance in manned spacecraft control
p0270 N73-23897
SPACECRAFT DESIGN
NT SATELLITE DESIGN
SPACECRAFT DOCKING
Quality /probability/ evaluation of human operator ergatic processes controlling spacecraft during rendezvous and docking with orbital station
p0087 A73-17686
Reliability probability analysis on ergatic process in spacecraft control during approach and docking with orbital station
p0064 N73-12087
SPACECRAFT ENVIRONMENTS
Developments in space medicine.
p0086 A73-17569

Results and prospects of microbiological studies in outer space.
p0203 A73-26487
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
Advanced methods of recovery for space life support systems.
p0347 A73-37711
Reverse osmosis for wash water recovery in space vehicles.
[ASME PAPER 73-ENAS-12] p0349 A73-37971
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
Apollo 16 Biostack experiment for biological effects of cosmic ray heavy primaries on cell and tissue development and mutations of bacilli, Artemia and plant seeds
p0399 A73-42185
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Industrial hygiene, radiological health, and spacecraft sanitation studies in NASA Environmental Health Program
p0143 N73-17057
Cryogenic heat exchanger for removal of waste heat from spacecraft environmental control life support system
[NASA-CR-124301] p0340 N73-27071
Guidelines for extravehicular and intravehicular activities during space shuttle operation with emphasis on contingency situations - Vol. 2
[NASA-CR-133992] p0419 N73-31007

SPACECRAFT LANDING
NT MARS LANDING
NT PLANETARY LANDING
Visual cue reinforcement for skill retention in pilot simulated space vehicle approach and landing performance
[NASA-CR-128912] p0269 N73-23086

SPACECRAFT ORBITS
NT SATELLITE ORBITS

SPACECRAFT PERFORMANCE
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983

SPACECRAFT SHIELDING
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867

SPACECRAFT STERILIZATION
Spacecraft decontamination and sterilization by formaldehyde, beta-propiolactone, ethylene oxide, radiation and dry heat, noting effects on polymers
p0243 A73-30137
Sterilization technology in the United States space program.
p0288 A73-33697
Monitoring for microbial flora contamination on spacecraft surface, discussing cultural techniques and sampling methods for microorganisms detection and sterilization
p0288 A73-33698
Ten years of development of the Planetary Quarantine Program of the United States.
p0313 A73-35966
Developments in the analysis of planetary quarantine requirements.
p0395 A73-42159
Spacecraft polyurethane foam jacket sterilization by gas method, discussing ethylene oxide and methyl bromide sorption and desorption
p0395 A73-42160
Sanitizing agents for cleansing and decontaminating spacecraft environment
[NASA-CR-128591] p0603 N73-10149
Terminal sterilization process for unmanned lander spacecraft
[NASA-CR-129513] p0065 N73-12100
Sterilization parameters for spacecraft
[NASA-CR-129272] p0065 N73-12101
Planetary quarantine procedures for reduction of microbial burden on spacecraft
[NASA-CR-129793] p0070 N73-13086
Analysis of standards and precedures for planetary quarantine with emphasis on determination of mission specifications
[NASA-CR-130558] p0148 N73-17103
Nonsporicidal methods for solvent degradation of cured RTV 41 silicon potting compound and chemical curing effects on decontamination properties
[NASA-CR-130720] p0149 N73-17111
Evaluation of sterile access technique for repair and adjustment of sterile spacecraft
[NASA-TM-D-7147] p0151 N73-17122
Control equipment for sterilization facility used to thermally inactivate microbes on interplanetary space vehicle components
[NASA-CR-131103] p0185 N73-19122
Bibliography of citations relating to planetary quarantine from 1966 to 1971
[NASA-CR-131889] p0258 N73-22038
Microbial burden estimation for planning planetary quarantine of advanced spacecraft
[NASA-CR-131845] p0258 N73-22039
Thermal inactivation of Bacillus subtilis var. niger spores on Viking lander
[NASA-CR-133223] p0333 N73-26058
Dry heat inactivation of atypical Bacillus subtilis var. niger spores in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
Development of planetary quarantine measures for automated spacecraft
[NASA-CR-133202] p0334 N73-26066
Sterilization for unmanned landers
[NASA-CR-133742] p0411 N73-30064
Planetary quarantine requirements for automated spacecraft flights
[NASA-CR-135795] p0445 N73-33040

SPACECRAFT TRACKING
NT SATELLITE TRACKING

SPACECREWS
Space shuttle orbiter subsystems and control and display data required for crew operations - Vol. 2
[NASA-CR-128577] p0603 N73-10146
Psychological stresses and crew compatibility during interplanetary spacecraft flight
[JPRS-57878] p0106 N73-15113
Activity cycle data for spacecrews of Soyuz 3 to 9 spacecrafts before, during and after space flights
[JPRS-58173] p0137 N73-16068
Occupational medicine procedures for personnel in lunar receiving laboratory for Apollo 11 crew members
p0143 N73-17049
Ionization, thermoluminescence, and nuclear photographic emulsion dosimetry for monitoring radiation loads in spacecrews during manned space flight
p0173 N73-18100
Radiobiological effects of cosmic radiation in animals and standardization of permissible radiation levels for spacecrews
p0173 N73-18102
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews
p0174 N73-18106
Design and test performance of space crew waste collection system
[NASA-CR-133977] p0366 N73-27945
Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 1
[NASA-CR-135487] p0421 N73-31020

Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 2 [NASA-CR-135488] p0421 N73-31021

SPACELAB
Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 1 [NASA-CR-135487] p0421 N73-31020
Role of man in flight experiment payload missions with application to Spacelab operations - Vol. 2 [NASA-CR-135488] p0421 N73-31021

SPATIAL DEPENDENCIES
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays. p0234 A73-28095
Spatial characteristics of chromatic induction - The segregation of lateral effects from straylight artefacts. p0346 A73-37419
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions p0393 A73-41887

SPATIAL DISTRIBUTION
Properties of human visual orientation detectors - A new approach using patterned afterimages. p0239 A73-29124
Human average evoked potential distribution over scalp to associate cortical electrical activity with voluntary movement, reacting to EMG activity p0242 A73-29990
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies. p0308 A73-34839
The visual cortex as a spatial frequency analyser. p0308 A73-34840
Spatial information coding in the human visual system - Psychophysical data. p0309 A73-35240
Spatial frequency channels in human vision and the threshold for adaptation. p0346 A73-37416
Metixenum and Meclocin under double blind comparison test conditions against motion sickness p0226 N73-21100

SPATIAL FILTERING
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system. p0309 A73-35241
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters. p0407 A73-42958

SPATIAL ISOTROPY
U SPATIAL DISTRIBUTION

SPATIAL ORIENTATION
U ATTITUDE (INCLINATION)

SPECIES DIFFUSION
Hemoglobin species diffusion effect on oxygen transport in moving and stationary flat films of hemoglobin solution p0426 A73-43993

SPECIFICATIONS
NT EQUIPMENT SPECIFICATIONS
Cleaning processes and postcleaning inspection procedures for meeting oxygen system cleaning requirements [NASA-SP-3072] p0111 N73-15155

SPECTRA
NT ABSORPTION SPECTRA
NT ELECTROMAGNETIC SPECTRA
NT EMISSION SPECTRA
NT ENERGY SPECTRA
NT MOLECULAR SPECTRA
NT NOISE SPECTRA
NT OXYGEN SPECTRA
NT POWER SPECTRA
NT RADIATION SPECTRA
NT SPECTRAL BANDS

SPECTRAL ABSORPTION
U ABSORPTION SPECTRA

SPECTRAL ANALYSIS
U SPECTRUM ANALYSIS

SPECTRAL BANDS
NT ABSORPTION SPECTRA
Algorithm for spectrum decomposition during continuous man-computer interaction, noting Gaussian distribution of spectral bands and linear approximation for background p0159 A73-22971

SPECTRAL EMISSION
Spectral emissivity of skin and pericardium. p0427 A73-44213
Remote detection of water content and spectral properties of leaves in different soybean crop species p0068 N73-13070
Spectral characteristics of normal and nutrient-deficient maize leaves [NASA-CR-132145] p0293 N73-24119

SPECTRAL ENERGY DISTRIBUTION
Mathematical model for spectral distribution function of brain waves, noting analogy with RC oscillator p0588 A73-12557
Proportional counter energy deposition spectral quality prediction from experimental data, using folding procedure to produce composite energy absorption distributions for biological materials p0280 A73-31549
Spectrophotometric measurements of spectral composition of conifer and decidous forests p0379 N73-29337

SPECTRAL NOISE
U WHITE NOISE

SPECTROMETERS
NT MASS SPECTROMETERS
Transmission characteristics of commercially available, laser eye protectors with Cary 14 spectrophotometer [AD-746293] p0612 N73-11100

SPECTROMETRY
U SPECTROMETERS

SPECTROPHOTOMETERS
Spectrophotometric measurements of spectral composition of conifer and decidous forests p0379 N73-29337

SPECTROSCOPES
U SPECTROMETERS

SPECTROSCOPIC ANALYSIS
Twin spectrograph measurements at 2520-3375 A of metal trace elements in biological sample solutions p0088 A73-17692
Spectrometric determination of copper, iron, cobalt, nickel, and manganese complexes in biological samples p0256 N73-22022

SPECTROSCOPY
NT INFRARED SPECTROSCOPY
NT MASS SPECTROSCOPY
NT SPECTROSCOPIC ANALYSIS
NT ULTRAVIOLET SPECTROSCOPY

SPECTRUM ANALYSIS
Status and prospects of EEG spectral analysis. p0058 A73-15278
Non-Gaussian properties of the EEG during sleep. p0126 A73-21465
Algorithm for spectrum decomposition during continuous man-computer interaction, noting Gaussian distribution of spectral bands and linear approximation for background p0159 A73-22971
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer p0237 A73-28502
Heart rate variability analysis for ergonomics purposes, discussing interpolations, algorithms and physiological effects and spectral analysis methods p0250 A73-30882
Automatic analysis and classification of electroencephalograms p0309 A73-34966
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin p0356 A73-39145
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.

p0385 A73-41011
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521
Effects of solar radiation on photomorphogenesis of plants based on spectral distribution of solar energy in daytime
p0378 N73-29322
Statistical analysis of NASA multivariate spectrum analysis program performance after modifications [NASA-CR-134011] p0417 N73-30995

SPEECH
NT ARTICULATION
NT WORDS (LANGUAGE)
EEG alterations by short time stress due to delayed speech feedback during reading, noting alpha and beta wave changes
p0056 A73-14473
Cerebral localization of speech, discussing cortical lesions, aphasia and mental activity correlation theories
p0126 A73-21425
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
Binaural improvement in normal and defective ears in background of other voices
[AD-746101] p0597 N73-10103
Analysis and perception of nonspeech marine sounds
[OES-6/72] p0421 N73-31023

SPEECH DISCRIMINATION
U SPEECH RECOGNITION

SPEECH RECOGNITION
Book - Foundations of modern auditory theory. Volume 2.
p0243 A73-30276
Acoustic model and linguistic, syntactic, lexical and semantic factors in speech perception and production process
p0243 A73-30277
Impairment to hearing from exposure to noise.
p0287 A73-33676
Corti organ lesion effects on signal perception in patients with noise induced hearing loss, correlating speech discrimination with age and sound level
p0352 A73-38182
Binaural processing of speech intelligibility in light aircraft
[FAA-AM-72-31] p0102 N73-14094
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098
Noise effects on hearing conservation in aircrew and ground support personnel of aerospace operations
p0148 N73-17101
Speech discrimination by personnel with hearing loss at 3 kHz in noise
[AD-752974] p0298 N73-25118
Analysis and perception of nonspeech marine sounds
[OES-6/72] p0421 N73-31023

SPEED CONTROL
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932

SPEED INDICATORS
NT HOT-FILM ANEMOMETERS
NT TACHOMETERS

SPEED REGULATION
U SPEED CONTROL

SPERMATOCYTES
U GAMETOCYTES

SPERMATOGENESIS
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphological changes in testes and spermatogenesis process of dogs subjected to chronic and combined gamma irradiation
p0134 N73-16048

SPHYGMOGRAPHY
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218

SPIKE POTENTIALS
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Reaction time method using EEG monitored paroxysm controlled auditory stimuli for responsiveness /consciousness/ evaluation of spike wave burst onset during epileptic seizures
p0156 A73-22695
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
Computer acquisition of multiunit nerve-spike signals.
p0403 A73-42671
Bioelectrical activity differentiations in cat cortex during sleep inhibition
p0257 N73-22026

SPILLING
Evaporation rates and toxic plume dispersion for defining downwind evacuation areas for populations adjacent to accidental propellent spills on shipping routes
[NASA-TM-X-68188] p0141 N73-16097

SPIN DYNAMICS
Isocyanide spin label for studying conformational transitions in cytochrome c, emphasizing heme group
[NASA-TT-F-14623] p0065 N73-12099

SPINAL CORD
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257
Electrophysiological investigation of supraseqmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics
p0118 A73-20001
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funiculs of the cat spinal cord
p0118 A73-20002
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004
Ontogenic cerebrospinal reflex activity studies, covering spinal cord morphology, reflex arches, inhibition, intracentral responses and post-tetanic potentiation
p0121 A73-20366
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576
Structural characteristics of connections between medial efferent systems and spinal cord neurons
p0156 A73-22577

Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578

Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579

Organization of spontaneous muscular activity in man
p0157 A73-22863

Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677

Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515

Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525

Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man
p0249 A73-30845

Mathematical analysis of the operation of regulatory mechanisms of the spinal cord
p0354 A73-39005

Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658

Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994

Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249

Influence of isolated heating of spinal column on respiratory rate and panting in dogs
[NASA-TT-F-14998] p0338 N73-27054

Change in impulse activity of neurons in respiratory center during electric stimulation of vestibular nerve and dorsal roots in spinal cord
p0442 N73-33017

SPINDLES
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934

SPINE
Aerodynamic pumping-caused spinal fractures in two pilots during high speed flight
p0586 A73-12154

A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429

Vestibular and spinal control of eye movements.
p0316 A73-36440

The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572

Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943

Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents
p0401 A73-42652

Radiological assessment of the vertebral column from the point of view of aviation medicine
p0409 A73-43131

SPIROMETERS
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172

Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332

Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462

Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113

SPLEEN
Transverse acceleration effects on dioxyribonucleic acid catabolism in rat spleen and liver
p0063 N73-12080

SPLINE FUNCTIONS
Spline function interpolation in interactive hemodynamic simulation.
p0098 A73-18889

SPORES
Nonsporicidal methods for solvent degradation of cured RTV 41 silicon potting compound and chemical curing effects on decontamination properties
[NASA-CR-130720] p0149 N73-17111

Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores
p0291 N73-24108

Thermal stress and mechanical shock effects on release of bacterial spores from stainless steel surfaces with application to Mars landing
[NASA-CR-133868] p0416 N73-30987

SPRAYED PROTECTIVE COATINGS
U PROTECTIVE COATINGS

SPRAYING
NT PLASMA SPRAYING

STABILITY
NT AERODYNAMIC STABILITY
NT DYNAMIC STABILITY
NT FREQUENCY STABILITY
NT HOVERING STABILITY
NT STORAGE STABILITY
NT SYSTEMS STABILITY
NT THERMAL STABILITY

STABILITY AUGMENTATION
U FEEDBACK CONTROL
U STABILIZATION

STABILIZATION
Stabilization methods in collecting and shipping of human sera for chemical analyses
p0143 N73-17053

STAIRSTEPS
Exercise testing for evaluation of cardiac performance.
p0043 A73-13538

Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540

STANDARDIZATION
New norms and standardization trends for dosimetry and protection against radiation
p0195 A73-25311

Standardization of tests and classification of color perception abnormalities in military personnel
p0179 N73-19071

STANDARDS
Public health exposure limits to nitrogen oxide, hydrogen chloride, and hydrogen fluoride air pollutants
[AD-751438] p0139 N73-16084

Public health exposure limits for air pollutants
[AD-751437] p0140 N73-16088

Radiobiological effects of cosmic radiation in animals and standardization of permissible radiation levels for spacecrews
p0173 N73-18102

Noise standards for habitable houses, rest homes, hospitals, camps, public facilities, and streets in residential areas
[NASA-TT-F-15065] p0414 N73-30088

U.S., Soviet, and Polish standards for radiation levels for humans
p0415 N73-30905

STAPHYLOCOCCUS
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828

Methods for improving bacterial transport media
[NASA-CR-128958] p0297 N73-25113

STARCHES
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789

STATIC PRESSURE
NT HYDROSTATIC PRESSURE

STATIONS
NT ORBITAL SPACE STATIONS

NT SALYUT SPACE STATION
NT SPACE STATIONS
NT TRACKING STATIONS
STATISTICAL ANALYSIS
NT AMPLITUDE DISTRIBUTION ANALYSIS
NT BIVARIATE ANALYSIS
NT CORRELATION COEFFICIENTS
NT FACTOR ANALYSIS
NT MULTIVARIATE STATISTICAL ANALYSIS
NT NORMAL DENSITY FUNCTIONS
NT PROBABILITY DISTRIBUTION FUNCTIONS
NT REGRESSION ANALYSIS
NT STATISTICAL CORRELATION
NT STATISTICAL DECISION THEORY
NT STATISTICAL TESTS
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra p0586 A73-12160
Vector summation dial for analysis of time-nonstationary cyclic biological data, applying to peak time change detection and random walks p0049 A73-14120
Renal lithiasis among civil operating aircrew p0127 A73-21536
The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information. p0207 A73-27646
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method p0354 A73-39000
A study of the statistical patterns of visual perception of a black and white raster image p0385 A73-40861
Ability of a human operator to estimate the probability characteristics of alternative stimuli p0394 A73-41893
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man p0401 A73-42656
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer p0401 A73-42657
Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease. p0408 A73-42975
Statistical analysis of impact injuries to seated human responding to square wave energy absorption of vertical deceleration pulse representing helicopter crash [AD-745919] p0612 N73-11102
Statistical analysis of effect of simulated sonic booms on sleep patterns of male subjects [FAA-AM-72-35] p0333 N73-26057
Performance decrement and response time of current and noncurrent jet Naval pilots [AD-761463] p0421 N73-31025
STATISTICAL CORRELATION
Examples for signal-noise improvement with the aid of polarity correlation analysis in the biological sector p0086 A73-17593
Statistical correlation between human mental activity and EEG beta rhythm wave energy and frequency characteristics p0092 A73-18159
Statistical correlations of maximum oxygen consumption, body weight and endurance /work/ performance in exercise-oxygen studies p0096 A73-18472
STATISTICAL DECISION THEORY
Noise blurred image recognition probability characteristics from experimental investigation, showing difference from statistical decision theory data p0428 A73-44667
STATISTICAL DISTRIBUTIONS
NT PROBABILITY DISTRIBUTION FUNCTIONS
Statistical distribution methods for analyzing formation of reflexes conditioned to time intervals between periodic unconditioned stimuli p0093 A73-18166
STATISTICAL PROBABILITY
U PROBABILITY THEORY
STATISTICAL TESTS
The superiority of the pair-comparisons method for scaling visual illusions. p0311 A73-35497
STEADY FLOW
Micropolar model of blood steady flow through rigid circular tubes, presenting equations solutions and velocity profiles p0042 A73-13302
STEAM
Steam reactor system for manned spacecraft waste processing [NASA-CR-134048] p0440 N73-32021
STELLAR DOPPLER SHIFT
U DOPPLER EFFECT
U EXTRATERRESTRIAL RADIATION
STEREOCHEMISTRY
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations. p0202 A73-26480
STEREOSCOPIC VISION
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection p0046 A73-13762
Monocular and binocular clues interaction in depth perception and spatial orientation, discussing stereopsis testing p0079 A73-16483
The role of colour perception and 'pattern' recognition in stereopsis. p0121 A73-20266
Scalar perceptions with binocular cues of distance. p0235 A73-28176
Stereoscopic depth aftereffects with random-dot patterns. p0308 A73-34841
Stereoscopic vision - Cortical limitations and a disparity scaling effect. p0312 A73-35922
Vision model for robot object recognition system [NASA-CR-133458] p0365 N73-27936
Factors affecting stereoscopic vision and depth perception in human beings [AD-759261] p0375 N73-29050
STERILIZATION
NT CHEMICAL STERILIZATION
NT SPACECRAFT STERILIZATION
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials p0087 A73-17681
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972. p0288 A73-33691
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure p0288 A73-33695
Lunar sample quarantine procedures - Interaction with non-quarantine experiments. p0313 A73-35978
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/. [ASME PAPER 73-ENAS-16] p0350 A73-37973
Analysis of resistance of cultured and natural microbes in ethylene oxide sterilization method [NASA-TT-F-14612] p0069 N73-13078
Radiation sterilization with Van de Graaff accelerators [NASA-TT-F-14821] p0219 N73-20120
Environmentally controlled suit for working in sterile chamber [NASA-CASE-LAR-10076-1] p0221 N73-20137
Development of germ-free plants and tissues [NASA-CR-128947] p0293 N73-24122
STERILIZATION EFFECTS
NT DECONTAMINATION
NT DEGRADATION
NT THERMAL DEGRADATION
Biological indicators and the effectiveness of sterilization procedures.

p0288 A73-33692
Formaldehyde gas as a sterilant.
p0288 A73-33694
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
STEROIDS
NT ACTINOMYCIN
NT ALDOSTERONE
NT CHOLESTEROL
NT CORTICOSTEROIDS
NT CORTISONE
Adaptive hormone action and nonspecific adaptive function of steroid hormones, discussing stress resistance mechanisms of steroids pharmacologically classified as syntoxic and catatoxic
p0155 A73-22536
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
Sterols of the fungi - Distribution and biosynthesis.
p0429 A73-44699
Statistical analysis of steroid levels in parotid secretions of humans under prolonged mental stress
[AD-747682] p0072 N73-13104
Gas chromatography-mass spectrometry for analyzing fatty acid and sterol concentrations in plant tissue samples
[NASA-CR-128740] p0186 N73-19131
STETHOSCOPES
Stethoscope- or phonocardiograph-detectable systole-associated left atrial sound in terms of activity recording, sound genesis, hemodynamic correlations and clinical applications
p0199 A73-25696
STIMULANT
NT ATROPINE
NT CENTRAL NERVOUS SYSTEM STIMULANTS
NT NOREPINEPHRINE
Stimulating and tranquilizing drug effects on human performance indices.
p0256 N73-22021
STIMULATED EMISSION DEVICES
NT ARGON LASERS
NT GALLIUM ARSENIDE LASERS
NT GAS LASERS
NT INFRARED LASERS
NT LASERS
NT PULSED LASERS
STIMULATION
NT AUDITORY STIMULI
NT SENSORY STIMULATION
STIMULI
Human attention and reaction performance as function of type and latency in response to signal stimulus
[AD-747801] p0073 N73-13110
Sound, light, and proprioceptive stimuli for inhibiting vestibular illusion in man
p0181 N73-19087
Accuracy of method of constant stimuli for studying sensory capabilities of man in relation to display systems
[AD-753009] p0187 N73-19141
STOCHASTIC PROCESSES
NT RANDOM PROCESSES
NT RANDOM WALK
Stochastic model application to divergence of horse-pig lineage from common ancestor in terms of hemoglobin and fibrinopeptides alpha and beta chains
p0116 A73-19218
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
STOL AIRCRAFT
U SHORT TAKEOFF AIRCRAFT
STOMACH
Hypoxia effects on human gastric motor functions in pressure chamber experiments using electrogastrography
p0064 N73-12085
Stomach shielding effects on chromosomal aberration frequency in guinea pig and rat marrow cells after gamma radiation at doses of 50 to 200 r
p0213 N73-20074
STONES (ROCKS)
U ROCKS
STONY METEORITES
NT CARBONACEOUS METEORITES
STORAGE STABILITY
Megarad plastic film dosimeter.
p0427 A73-44212
Storage stability of intermediate moisture foods for space shuttle
[NASA-CR-133978] p0366 N73-27944
STORMS (METEOROLOGY)
STRAIN DISTRIBUTION
U STRESS CONCENTRATION
STRAIN GAGES
Implantable transducer for in vivo measurement of bone strain.
p0206 A73-27443
Design and performance of strain gage transducer as blood pressure recording device
p0231 N73-21144
STRAIN SOFTENING
U PLASTIC DEFORMATION
STRATEGY
Influence of observing strategies and stimulus variables on watchkeeping performance.
p0580 A73-10771
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task.
p0353 A73-38378
STRATOTANKER AIRCRAFT
U C-135 AIRCRAFT
STRENGTH OF MATERIALS
U MECHANICAL PROPERTIES
STREPTOCOCCUS
Methods for improving bacterial transport media
[NASA-CR-128958] p0297 N73-25113
STRESS (BIOLOGY)
Masking phenomenon for measuring state of fatigue and stress of nervous system
[AD-752975] p0300 N73-25129
STRESS (PHYSIOLOGY)
NT ACCELERATION STRESSES (PHYSIOLOGY)
NT CENTRIFUGING STRESS
Formalization of certain functional aspects of the external respiration system
p0580 A73-10657
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
Prediction tests for pulmonary elasticity model of expansion stresses in lung region restricted by obstructed airways
p0048 A73-14114
Organ and body mass changes in restrained and fasted domestic fowl.
p0057 A73-14975
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHF-11] p0061 A73-15878
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931
Human tendon stress recovery after load removal as function of time, sex, age and side differences
p0119 A73-20033
Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802
Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803

Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
Adaptive hormone action and nonspecific adaptive function of steroid hormones, discussing stress resistance mechanisms of steroids pharmacologically classified as syntoxic and catatoxic
p0155 A73-22536
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Ergonomic endurance limits, physiological strains and fatigue assessment in video coding information task performance as function of work shift time length
p0198 A73-25649
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/
p0279 A73-31504
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
Annual Scientific Meeting, Las Vegas, Nev., May 7-10, 1973, Preprints.
p0287 A73-33421
Cobalt compound administration effects on hypoxic stress control, testing polycythemic response and cobalt retention in rats
p0307 A73-34744
Localizing factors in arteriosclerosis.
p0320 A73-36537
Tolerance to heat following cold stress.
p0325 A73-36784
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines.
p0329 A73-36922
Serial correlation of physiological time series and its significance for a stress analysis
p0352 A73-38159
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain
p0389 A73-41278
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
Underwater submersion and prolonged underwater submersion effects on diver tactile sensitivity
[AD-743709] p0594 N73-10082
Visual evoked cortical response as measure of stress in naval environment, using rapid flash rates
[AD-744934] p0595 N73-10088
Concepts for reduction of fatigue in sustained tactical operations
[AD-746643] p0611 N73-11090
Noise and response complexity effects on human attention and performance in visual perception task
[AD-747797] p0072 N73-13105
Pupil enlargement in relation to operator stress during adaptive critical tracking task
[AD-749075] p0100 N73-14081
Bioastronautics research, including stress effects, sensory perception, and human performance
[NASA-SP-3006] p0104 N73-15091
Heat and cold stress effects in humans
p0104 N73-15094
Tolerance levels, physiological effects, and performance degradation during simultaneous or sequential exposures to environmental stresses
p0106 N73-15110
Dynamic electrocardiography in periodic health examinations for detection of cardiac abnormalities
p0144 N73-17065
Electrocardiographic stress testing for determining influence of occupational and other stresses on ischemic heart disease
p0146 N73-17082
Combined stress effects in human communication and motion sickness biodynamics
p0188 N73-19144
Temperature and noise irradiation effects on human energetic metabolism during vigilance task
p0189 N73-19155
Stress reactions of vestibular apparatus to ionizing radiation, coriolis forces, and gravitational stimuli
[AD-753511] p0220 N73-20132
Reaction assessment of vestibular disorientation stress for aircrew selection, using visual displays and tasks
p0225 N73-21096
Hashish smoking effects on human oxygen consumption during physical stress and safe driving ability
p0228 N73-21115
Hypoxia effects on release of gaseous wastes from rat vital functions
p0372 N73-29025
Aerospace Medical Research Laboratory handbook on medical monitoring and treatment of environmental stresses
[AD-760813] p0377 N73-29061
Subjective and physiological indicators of fatigue and performance during vigilance task
[AD-761503] p0413 N73-30077
Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks
[OES-8/72] p0421 N73-31024
Physiological stress effects of aerospace environment on human body and animals
[NASA-TT-F-15081] p0437 N73-32001
Aerospace psychology and physiology
[JPRS-60248] p0441 N73-33014
Cross correlation analysis of stress rhythm during stimuli of varying biological significance
p0450 N73-33071

STRESS (PSYCHOLOGY)

Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308

EEG alterations by short time stress due to delayed speech feedback during reading, noting alpha and beta wave changes
p0056 A73-14473
Personal life changes and health stresses in contrast to accident proneness as factors in pilot error
p0083 A73-16732
Physiological tests for hypothalamus regions stimulation effects on coronary circulation, noting hypoxia and emotional stress effects
p0088 A73-17770
German monograph - Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability.
p0122 A73-20388
German monograph - The objectivization of the effect of load and stress on an information-reception process of man with the aid of acoustically evoked potentials.
p0122 A73-20389
Central nervous system stresses effects estimation, discussing ocular positioning movements functional significance and psychological processes
p0128 A73-21542
Psychic stress detection and measurement, discussing psychological test methods and physiological correlates
p0163 A73-23684
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328
Experimental study of emotional stress in operators
p0193 A73-25038
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533
Emotional overstress effects on the indices of the blood coagulation system in monkeys
p0249 A73-30846
Heart rate variability and the measurement of mental load; Proceedings of the Symposium, London, England, October 1971.
p0250 A73-30876
Psychological factors influencing the relationship between cardiac arrhythmia and mental load.
p0250 A73-30877
Heart rate variability and work-load measurement.
p0250 A73-30879
Mental load and the measurement of heart rate variability.
p0250 A73-30881
Self destructive behavior of aircraft pilot due to stress accumulation, discussing man machine relationship, coping mechanisms, competence and invulnerability myth
p0307 A73-34746
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
Study of Indian naval aircrew experiences and psychic factors in disorientation.
p0328 A73-36919
The mechanisms of the occurrence of emotional stress in man.
p0328 A73-36920
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756
Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161
Experimental analysis of conditions for onset of emotional stress
p0362 A73-39800
Stress and strain in student helicopter pilots.
p0386 A73-41155
Cognitions and 'placebos' in behavioral research on ambient noise.
p0406 A73-42950
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549
Statistical analysis of steroid levels in parotid secretions of humans under prolonged mental stress
[AD-747682] p0072 N73-13104
Noise and response complexity effects on human attention and performance in visual perception task
[AD-747797] p0072 N73-13105
Cognitive functioning test to measure human performance in underwater diving stress
[AD-748036] p0072 N73-13108
Feasibility of saliva analysis for measuring mental stress in man
[AD-747671] p0073 N73-13111
Personality, occupation, and job stress effects on physiological risk factor in human coronary heart disease
p0143 N73-17054
Standardized performance battery for assessing effects of environmental stressors particularly noise on human performance
[NASA-CR-2149] p0148 N73-17102
Indices of emotional stress in cosmonauts during Voskhod 2 and Soyuz flights
[JPRS-58039] p0148 N73-17104
Combined stress effects in human communication and motion sickness biodynamics
p0188 N73-19144
Pilot selection by means of concentration stress test
p0368 N73-27957
Aerospace psychology and physiology
[JPRS-60248] p0441 N73-33014

STRESS ANALYSIS
NT PHOTOGRAPHIC MEASUREMENT
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168

STRESS CALCULATIONS
U STRESS ANALYSIS

STRESS CONCENTRATION
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689

STRESS DISTRIBUTION
U STRESS CONCENTRATION

STRESS MEASUREMENT
Measures to determine psychophysiological reactions of military flight crews to flying stress
p0188 N73-19148

STRESS RELAXATION
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098

STRESS-STRAIN DISTRIBUTION
U STRESS CONCENTRATION

STRESSES
NT COMBINED STRESS
NT SHEAR STRESS
NT THERMAL STRESSES
NT TORSIONAL STRESS
NT TRIAXIAL STRESSES
NT VIBRATIONAL STRESS

STROBOSCOPES
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli
p0096 A73-18624
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093

STRUCTURAL ANALYSIS
NT DYNAMIC STRUCTURAL ANALYSIS
NT MATRIX METHODS
STRUCTURAL DESIGN
Design and performance of exhaust hood with protective air current outside of hood surface p0144 N73-17063
Concept evaluation and subsystem analyses for design of remote controlled teleoperator visual system
[NASA-CR-124059] p0150 N73-17117
Multivariate limits for describing cockpit related anthropometric features of aviation personnel
[AD-752032] p0151 N73-17124
Design and performance of metabolic gas analyzer using mass spectrometer and digital data printout
[NASA-CR-128842] p0190 N73-19160
Design of hemoglobin tester, flow ventilation systems, blood viscometer, isotope handling equipment, and blood pressure measuring device
[NASA-TM-X-66214] p0231 N73-21139
Design of electrophoretic mass screening tester for sickle cell anemia p0231 N73-21140
Design of anesthetic flow valve canister system for exhaust gas absorption and laminar ventilation system for operating rooms p0231 N73-21141
Design of relative velocity blood viscometer p0231 N73-21142
Design and fabrication of prototype particulate regenerative filter with backflush for spacecraft fluid system
[NASA-CR-115505] p0268 N73-23084
Conference on manipulator design considering basic elements p0335 N73-26074
Design requirements for remotely controlled master-slave manipulators p0335 N73-26076
Manipulator kinematics in selecting geometrical shapes of containers and chambers p0336 N73-26087
STRUCTURAL DYNAMICS
U DYNAMIC STRUCTURAL ANALYSIS
STRUCTURAL MEMBERS
NT MEMBRANE STRUCTURES
STRUCTURAL VIBRATION
Structural vibrations in aerospace operations and effects on man p0148 N73-17099
STUDENTS
Computer-based pupil/tracking monitoring system for Mesa Public Schools, Mesa Arizona p0191 N73-19985
Relations between sociometric variables and criteria of ability and behavior of student pilots p0367 N73-27954
STYLUSES
U PENS
STYRENES
Systems design for amine carbon dioxide sorber bed to be used in manned spacecraft
[NASA-CR-111849] p0420 N73-31018
SUBARCTIC REGIONS
Effects of adverse Northern environment on human physiology and performance under military exercise conditions
[DCIEM-882] p0376 N73-29056
SUBCIRCUITS
U CIRCUITS
SUBGRAVITY
U REDUCED GRAVITY
SUBLETHAL DOSAGE
Effects of antiradiation drug dosage on mice and rat tolerance to transverse acceleration overloads p0211 N73-20055
SUBLIMINAL STIMULI
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses p0160 A73-23308
Increment thresholds for multiple identical flashes in the peripheral retina. p0424 A73-43343
SUBMARINES
Nuclear submarine atmospheric constituent monitoring, covering mass spectrometers, IR carbon monoxide sensors, system development, requirements testing and spacecraft applications
[ASME PAPER 73-ENAS-9] p0349 A73-37970
Physiological effects of 12 submarine personnel during prolonged exposure to sonar signals at 85 db (five day exposure)
[AD-744938] p0594 N73-10087
Motivational patterns underlying devolunteering by submarine graduate school personnel
[AD-749324] p0260 N73-22054
SUBMERGED BODIES
NT DIVING (UNDERWATER)
Role of mineralocorticoids in the natriuresis of water immersion in man. p0156 A73-22676
Method for recovery of sunken bodies at depths of between 30 and 50 m p0367 N73-27955
Influence of blue green algae on crystalline calcium carbonate formation on river rocks
[NASA-TT-F-15028] p0375 N73-29046
SUBMERGING
Effects of immersion with the head above water on tissue nitrogen elimination in man. p0589 A73-12563
Respiration mechanics during weightlessness simulation in an immersion medium p0124 A73-20986
Roentgenographic study of relative heart motion during vibration in water-immersed cats. p0289 A73-34039
Changes in lung capacity, air passage resistance, and dynamic compliance of humans during water immersion to simulate weightlessness p0135 N73-16053
Water immersion model for simulating renin, aldosterone, and natriuresis effects of prolonged weightlessness on man p0174 N73-18110
Immersion effects on human physiological motor functions p0180 N73-19081
SUBMILLIMETER WAVES
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds p0427 A73-44096
SUBSONIC SPEED
Wind tunnel tests to determine structural integrity of birds under conditions simulating ingestion of birds into inlets of high speed aircraft
[NASA-TM-X-68163] p0106 N73-15114
SUCROSE
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise. p0391 A73-41622
SUD AVIATION AIRCRAFT
NT CONCORDE AIRCRAFT
SUGARS
NT DEXTRANS
NT GLUCOSE
NT MONOSACCHARIDES
NT RIBOSE
NT SUCROSE
SUITS
NT PRESSURE SUITS
NT SPACE SUITS
SULFIDES
NT INORGANIC SULFIDES
SULFONES
Liquid retention in chlorpropamide therapy and water intoxication of patients
[NASA-TT-F-14597] p0609 N73-11077
SULFUR COMPOUNDS
NT INORGANIC SULFIDES
NT SULFONES
NT SULFUR OXIDES
NT THIOLS
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood p0157 A73-22856
SULFUR OXIDES
Effects of SO2 decay product toxicity on human physiological functions p0099 N73-14071

SUMMARIES
NT ABSTRACTS
SUN
Research in aerospace, biological, and solar sciences
[AD-746143] p0609 N73-11080
SUPERSONIC AIRCRAFT
NT CONCORDE AIRCRAFT
NT F-4 AIRCRAFT
NT SUPERSONIC TRANSPORTS
SUPERSONIC PRESSURE DISTRIBUTION
U PRESSURE DISTRIBUTION
SUPERSONIC TRANSPORTS
NT CONCORDE AIRCRAFT
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport p0331 A73-36947
SUPINE POSITION
Effects of tilting on pulmonary capillary blood flow in normal man. p0361 A73-39786
Functional state of the auditory analysor under conditions of prolonged clinostatic hypokinesia p0425 A73-43789
Acceleration effects on mechanical impedance of human body in supine position p0368 N73-27963
SUPPORT SYSTEMS
NT GROUND SUPPORT SYSTEMS
NT PORTABLE LIFE SUPPORT SYSTEMS
SUPPRESSORS
Inhibitory interaction in the retina of Limulus. p0161 A73-23311
SURFACE CHEMISTRY
U SURFACE REACTIONS
SURFACE INTERACTIONS
U SURFACE REACTIONS
SURFACE PROPERTIES
NT SURFACE ROUGHNESS
NT SURFACE TEMPERATURE
Automatic swabbing apparatus for sampling of microbiological surfaces
[NASA-CASE-LAR-11069-1] p0136 N73-16061
SURFACE REACTIONS
Quantitative evaluation of superficial organic contaminants, soluble in haloqenated solvents, discussing sampled surface solvent extraction method and subsequent IR absorption spectrographic analysis p0096 A73-18547
SURFACE ROUGHNESS
Scattering of polarized light by rough and smooth leaf surfaces p0378 N73-29333
SURFACE TEMPERATURE
Assessment of temperature rise suppression by edge losses during irradiation. p0155 A73-22533
SURFACE VEHICLES
NT AIRCRAFT CARRIERS
NT AUTOMOBILES
NT LIFEBOATS
NT TRACTORS
NT WALKING MACHINES
Analysis of research activities conducted to determine criteria for passenger comfort in various methods of transportation p0591 N73-10024
SURFACTANTS
Soaps, detergents and surfactants dermatological hazards in personal hygiene use by spacecrews during long term space flight /Skylab/
[ASME PAPER 73-ENAS-26] p0350 A73-37981
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques. p0391 A73-41637
SURGEONS
NT FLIGHT SURGEONS
SURGERY
NT LABYRINTHECTOMY
Carpentier reconstructive valvuloplasty technique of mitral valve insertion from viewpoint of pilots return to flying duties p0586 A73-12157
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972. p0405 A73-42856
Use of Ringers lactate solution in pre- and postoperative fluid therapy
[NASA-TT-F-14600] p0592 N73-10071
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] p0437 N73-32000
SURGICAL INSTRUMENTS
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach. p0196 A73-25342
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] p0339 N73-27062
Surgical liquification pump for removing macerated tissue from eye
[NASA-CASE-LEW-12051-1] p0437 N73-32000
SURVIVAL
Helium-cold induced hypothermia in the white rat. p0205 A73-26975
Survival of soil bacteria during prolonged desiccation. p0251 A73-30959
Sea survival after ejection and parachute descent, describing hand operated canopy connector release to free pilot from entanglement or dragging p0284 A73-32665
Tolerance to immersion in cold water p0331 A73-36943
Microorganism survival in simulated Mars environment p0185 N73-19116
Influence of head and stomach shielding on radiation sickness and animal survival from gamma-neutron irradiation p0213 N73-20071
Space vacuum and solar ultraviolet irradiation effects on survival of Bacillus subtilis spores p0291 N73-24108
Thermal inactivation of Bacillus subtilis var. niger spores on Viking lander
[NASA-CR-133223] p0333 N73-26058
Crew survival after emergency landing or ditching in unpopulated areas
[NASA-TT-F-15047] p0376 N73-29053
SURVIVAL EQUIPMENT
U-2 and SR-71 aircrews physiological training for high altitude and supersonic flight hazards, discussing pressure suits, ejection seats, parachutes and survival and life support equipment p0284 A73-32657
Multiple occupant flotation devices for commercial transport aircraft survivors sea ditching, discussing slide/raft design improvement for high density loading p0284 A73-32658
Analysis of US Navy aviation combat casualty experiences in Southeast Asia to determine effectiveness of rescue and recovery operations under combat conditions
[AD-761636] p0370 N73-27972
SUSPENDING (MIXING)
Light beam attenuation in suspensions of algae p0378 N73-29325
SWALLOWING
Phasic discharge activity and localization of sheep medullary neurons in relation to swallowing reflex after superior laryngeal nerve stimulation p0046 A73-13786
SWEAT
Perspiration secretion distribution over human body based on extended Kerslake cylinder model, comparing with predicted 4 hr sweat rate p0041 A73-13122
Quantitative influence of CO2 inhalation on thermal sweating in man. p0195 A73-25331
Transductal fluxes of Na, K, and water in the human eccrine sweat gland. p0281 A73-31923
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands. p0348 A73-37757
Responses of men and women to two-hour walks in desert heat. p0360 A73-39784

Desoxyribonucleases in sweat gland secretion of man
p0429 A73-44674

Sweat rate and heat conductance in thermoregulatory system during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074

SWEATING
U PERSPIRATION

SWIMMING
Oxygen uptake, heart rate and pulmonary ventilation during swimming for different speeds and styles, comparing to running and cycling data
p0577 A73-10171

Analysis of swimming motions.
p0194 A73-25184

SWINE
Effect of calcium-deficient diet on bone structure of pigs and dogs
[NASA-TT-F-13917] p0592 N73-10067

Pressure gradient measurements in swine and rats submitted to pressure pulses
[DLR-FB-71-72] p0113 N73-15164

Defined shock wave effects on miniature swine, describing organ injuries
p0369 N73-27965

Hematology of miniature pigs after rapid decompression
[DLR-FB-73-63] p0446 N73-33047

SWITCHING
NT MAGNETIC SWITCHING

Conditioned reflex switching effects in higher nervous system reactions as function of experimental stimuli background conditions /arousal, diurnal rhythms, test conditions, physiological condition/
p0248 A73-30567

Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424

SWITCHING FUNCTIONS
U SWITCHING

SYMBOLIC PROGRAMMING
NT COMPUTER PROGRAMMING

SYMBOLS
Double cross-validation of video cartographic symbol location performance.
p0082 A73-16719

SYMPATHETIC NERVOUS SYSTEM
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157

Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100

Studies of blood gas analysis at abnormal environment.
p0582 A73-11210

Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367

Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015

The pharmacology of practolol - A cardioselective beta adrenergic blocking drug.
p0153 A73-21850

Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365

Heart activity characteristics in a human operator during a control process
p0164 A73-23806

Vertebrate cardiac innervation via parasympathetic and sympathetic nervous system, considering synaptic transmission, nerve endings, stimulation and electrical effects
p0198 A73-25597

Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296

Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166

Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571

The role of the sympathetic section of the vegetative nervous system in the training of the organism for the influence of statokinetic irritants.
p0327 A73-36903

Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300

Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396

Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690

Neurogenic and local regulation of resistance and capacitance blood vessels, noting sympathetic nervous system influence on musculocutaneous and splanchnic regions
p0426 A73-43927

Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671

SYMPATHOMIMETICS
U ADRENERGICS

SYMPTOMOLOGY
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft.
p0050 A73-14161

Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289

SYMPTOMS
U SIGNS AND SYMPTOMS

SYNAPSES
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409

Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle
p0581 A73-11023

Morphological, physiological and pharmacological investigations of rat cerebellar cortex synaptic structure and function maturation and neurotransmitter receptivity development
p0051 A73-14256

Conditioned reflex learning and phenamine-stimulated functional activation of cerebral synaptic, protein synthesizing and energy generating apparatus
p0085 A73-17177

Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem
p0118 A73-19650

Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003

Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576

Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578

Vertebrate cardiac innervation via parasympathetic and sympathetic nervous system, considering synaptic transmission, nerve endings, stimulation and electrical effects
p0198 A73-25597

Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825

Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942
Russian book on structural and functional plasticity of interneuron synapses during readjustment to chemical and physical damage covering degenerative and regenerative changes
p0389 A73-41280
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926

SYNCHRONISM
NT FREQUENCY SYNCHRONIZATION
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Resynchronization of circadian rhythms following transmeridian flight observed in two groups of students
p0368 N73-27958
Time shift effects on human 17-hydroxy corticosteroid diurnal excretion noting transmeridian flights
[DLR-FB-73-58] p0412 N73-30070

SYNCHRONIZATION
U SYNCHRONISM

SYNCHRONIZERS
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481

SYNCODERS
Neural model as pulse interval processor
[AD-746007] p0606 N73-10169

SYNCOPE
NT BLACKOUT (PHYSIOLOGY)
Slow and fast heart rates and syncopal and dizzy attacks as manifestations of sick sinus syndrome, discussing ventricular artificial pacemaker as therapy
p0201 A73-26289

SYNDROMES
U SIGNS AND SYMPTOMS

SYNTAX
NT WORDS (LANGUAGE)

SYPHILIS
Salvarsan therapy of luetic patients and behavior of Wassermann reaction
[NASA-TT-F-14618] p0609 N73-11076

SYSTEM EFFECTIVENESS
Ancillary information effects on photointerpretation performance under four imagery system operation modes, noting identification accuracy independence on information variables
p0093 A73-18245
Effectiveness of synthetic fixed wing flight training equipment for military purposes
[AD-744447] p0604 N73-10158

SYSTEMIZATION
U SYSTEMS ENGINEERING

SYSTEMS ANALYSIS
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110
Concept evaluation and subsystem analyses for design of remote controlled teleoperator visual system
[NASA-CR-124059] p0150 N73-17117
Evaluation of sterile access technique for repair and adjustment of sterile spacecraft
[NASA-TN-D-7147] p0151 N73-17122
Application of systems analysis techniques to improve management controls within biomedical research programs
[NBS-TN-761] p0252 N73-21977
Examination of man machine systems efficiency in relation to cost criteria
p0414 N73-30087
Theory of systems for effective behavior predictions
p0447 N73-33054

SYSTEMS COMPATIBILITY
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701

SYSTEMS DESIGN
U SYSTEMS ENGINEERING

SYSTEMS ENGINEERING
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857
The use of bivariate distributions in achieving anthropometric compatibility in equipment design. I, II.
p0081 A73-16702
Work requirements test program for operator proficiency in tasks analogous to aircraft piloting under difficulty variation, deriving workload capability limits
p0082 A73-16722
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
System engineering aspects of the man-machine interface.
p0287 A73-33645
Man machine systems for flight safety, studying accidents, human factors in system design and implementation of personnel
p0303 A73-34078
Man-machine interface for controllers and end effectors.
p0344 A73-37325
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983
Minimum quadratic cost optimal control technology for design of F-4C aircraft manual control system
p0601 N73-10137
Design and performance of breathing metabolic simulator
p0075 N73-13850
Systems engineering methods for human performance enhancement in signal detection and flight control
[AD-748239] p0102 N73-14098
Design and performance of demand regulated liquid breathing systems for mammalian respiration
p0252 N73-21976
Parameters requiring consideration by planners and designers when planning EVA functions for astronauts - Vol. 1
[NASA-CR-128926] p0268 N73-23081
Conceptual designs of versatile EVA work-stations - Vol. 2
[NASA-CR-128927] p0268 N73-23082
Revised edition of human engineering guide to equipment design
[AD-758339] p0296 N73-24140
Ergonomic research and design principles for automatic control and man machine systems
[NASA-TT-F-716] p0413 N73-30079
Military personnel management and human factors engineering
[AD-763168] p0415 N73-30094
Systems design for advanced water recovery and waste processing in aerospace and domestic applications
[NASA-CR-134028] p0420 N73-31017
Psychological concept for developing cybernetic control devices
[JPRS-60103] p0440 N73-32019
Optimization of human performance in system design, training, and operation
[AD-764761] p0450 N73-33075

SYSTEMS MANAGEMENT
Air traffic controller responsibilities and performance evaluation criteria development, discussing manager/monitor functions, field evaluation tests and training criteria
p0353 A73-38472

SYSTEMS STABILITY
Stability behavior of adapting and untrained random logic nets, enabling intelligent interaction with environment
p0122 A73-20400
Biological order, structure and instabilities in terms of irreversible thermodynamic processes, entropy, dissipative structures, randomness, abiogenesis, hierarchic organization, chemical reactions and molecular biology
p0281 A73-31824

SYSTOLE
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.

p0086 A73-17596
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
Stethoscope- or phonocardiograph-detectable systole-associated left atrial sound in terms of activity recording, sound genesis, hemodynamic correlations and clinical applications
p0199 A73-25696
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome.
p0199 A73-25698
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260

SYSTOLIC PRESSURE
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685

T

TABLES (DATA)
Collection of marine fluorescence data from Atlantic, Gulf, and Pacific sites
[NASA-CR-114579] p0298 N73-25115

TACHISTOSCOPES
Tachistoscopically measured independent image size and visual field recognition capacities of human eye
p0206 A73-27109

TACHOMETERS
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509

TACHYCARDIA
Controlled tachycardia through voluntary change in exercise regime, investigating relation between heart rate and blood circulation
p0169 A73-24521
Emotionally induced increases in heart rate and plasma catecholamine and free fatty acids, noting relation to coronary heart disease
p0405 A73-42837

TACTILE DISCRIMINATION
Skin sensitivity of palms, wrists and forearms to focused ultrasound, noting evoked touch, pulsation, cold, warmth and prick sensations and applications in receptor physiology
p0080 A73-16695
German monograph on human information transmission by multidimensional tactile stimuli investigation using method of learned signals identification
p0122 A73-20393
Interindividual differences in homomodal and heteromodal scaling of auditory and vibrotactile stimulation intensity and duration, using magnitude estimation method
p0204 A73-26750
Visual perception dominance over touch related to threshold changes, analyzing nervous system reliance on sense with lower threshold
p0425 A73-43847
Feasibility determination of cutaneous communication system for working divers
[AD-750268] p0113 N73-15169
Electrocutaneous parameters for designing dynamic tactual communication system
p0230 N73-21135

TACTILE SENSATION
U TOUCH

TALKING
NT WORDS (LANGUAGE)

TANKS (CONTAINERS)
NT WING TANKS

TAPE MERGING
U DATA PROCESSING

U MAGNETIC TAPES

TAPE (DATA REDUCTION)
U DATA REDUCTION

TARGET ACQUISITION
Observer target acquisition performance dependence on target position within restricted visual field
p0081 A73-16711
Target-detection performance as a function of noise intensity and task difficulty.
p0201 A73-26320
Subjective tests of target acquisition time using television with image enhancement possibilities
[MBB-UFE-892-72-O] p0113 N73-15165
Peripheral acuity with complex stimuli at two viewing distances
p0191 N73-19965
Air-to-ground visibility of lights at low background levels
p0191 N73-19967
Effect of briefing information on target acquisition performance of observer
p0191 N73-19972
Use of psychometric tests to account for subjective variations in operations performance relative to target acquisition
p0191 N73-19974

TARGET RECOGNITION
Probability estimate for visual target detection in terms of luminance threshold and target size and duration
p0093 A73-18242
Autokinetic movement as a function of the implied movement of target shape.
p0117 A73-19549
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Searching for many targets - An analysis of speed and accuracy.
p0311 A73-35498
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775
Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778
Literature review on psychophysiological factors affecting visual perception of colored signal light
[AD-746297] p0610 N73-11083
Human recognition of contrasting target in noisy environment with diversion of attention
[FOA-2-C-2482-H5] p0611 N73-11092
Decision making behavior of sonar operator in target detection and reporting
[AD-750761] p0114 N73-15174
Evaluation of device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103
Strip photography used in simulation study of very low altitude detection of small stationary targets at very slow speeds
[AD-754928] p0222 N73-20146
Characterization of interaction between detection and visibility processes with application to search policies
p0294 N73-24130
Limitations on pilot visual perception of target from low flying aircraft
[AD-759651] p0300 N73-25136
Vision model for robot object recognition system
[NASA-CR-133458] p0365 N73-27936
Training program for improving performance of operators in locating targets in side-looking airborne radar
[AD-762342] p0371 N73-27979
Optimization of human performance in system design, training, and operation
[AD-764761] p0450 N73-33075

TARGETS
NT RADAR TARGETS
Psychophysical functions of range and time estimates by ground and aerial observers

[AD-747271] p0071 N73-13094
Rotating target providing high yield neutrons by He-4 reaction for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067
TASK COMPLEXITY
Intellectual ability and performance on a non-verbal problem-solving task. p0044 A73-13553
Work requirements test program for operator proficiency in tasks analogous to aircraft piloting under difficulty variation, deriving workload capability limits p0082 A73-16722
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis p0093 A73-18244
Target-detection performance as a function of noise intensity and task difficulty. p0201 A73-26320
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases. p0247 A73-30515
Psychological factors influencing the relationship between cardiac arrhythmia and mental load. p0250 A73-30877
Heart rate variability and work-load measurement. p0250 A73-30879
Influence of stimulus symmetry on visual scanning patterns. p0311 A73-35494
Interference of 'attend to and learn' tasks with tracking. p0353 A73-38377
Interactive effects of intense noise and low-level vibration on tracking performance and response time. p0386 A73-41153
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior. p0387 A73-41158
Adaptive measurement of vigilance decrement. p0423 A73-43211
Human performance in sequential task training for acquisition of perceptual motor skills under flight stress p0189 N73-19153
Pilot performance under certain hypnotic, tranquilizer, and barbiturate type drugs p0227 N73-21110
Effects of fatigue, age, and degree of difficulty on eye-hand coordination performance p0446 N73-33051
TASK SEQUENCERS
U CONTROL EQUIPMENT
U SEQUENTIAL CONTROL
TASKS
NT AUDITORY TASKS
NT VISUAL TASKS
Combat job performance and training for air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027
TAXONOMY
Ribosomal RNA base composition and molecular evolution in plants and animals of various taxonomic groups p0116 A73-19220
Chemiotaxionomic survey of carotenoid pigments in several species and groups of Basidiomycetes
[NASA-TT-F-14858] p0219 N73-20117
TEACHING
U EDUCATION
TEAMS
The prediction of team monitoring performance under conditions of varied team size and decision rules. p0081 A73-16710
TECHNIQUES
U METHODOLOGY
TECHNOLOGIES
NT BIOTECHNOLOGY
NT MILITARY TECHNOLOGY
General problems with psychology in scientific and technical creativity
[TT-70-57147-1] p0413 N73-30074
TECHNOLOGY ASSESSMENT
U.S. manned space flight food system development experience assessment, covering Mercury, Gemini, Apollo and manned orbiting laboratory programs p0050 A73-14168
Personnel radiation protection technology and criteria review, discussing dosimeter specifications and automatic data processing p0195 A73-25314
Circuit technology of a temperature-measurement transmitter for biotelemetric applications p0239 A73-28575
An anthropomorphic master-slave manipulator system. p0344 A73-37316
Man-machine interface for controllers and end effectors. p0344 A73-37325
TECHNOLOGY TRANSFER
Use of space technology to solve medical problems and improve medical equipment p0075 N73-13848
Aerospace technology for solving domestic solid waste disposal, water purification, and water recovery problems p0075 N73-13849
Space technology for developing ground based integrated medical laboratory p0075 N73-13851
Technology transfer of biomedical data for use in research of cardiovascular diseases
[NASA-CR-131246] p0211 N73-20053
NASA contributions to patient monitoring
[NASA-CR-131538] p0230 N73-21138
Medically related NASA technology applications and transfer activities
[NASA-CR-135527] p0418 N73-31001
TECHNOLOGY UTILIZATION
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals. p0084 A73-17134
The application of aerospace technology to patient monitoring. p0285 A73-32804
Space technology utilization for firefighters breathing equipment development, discussing design and field testing program
[ASME PAPER 73-ENAS-24] p0350 A73-37980
Applications of aerospace technology to biomedical research
[NASA-CR-129588] p0068 N73-13071
Technology utilization in biomedical areas for November 1972
[NASA-CR-129998] p0109 N73-15135
Applications of aerospace technology in biology and medicine
[NASA-CR-130544] p0142 N73-17047
Utilization of aerospace technology in biomedical field - Southwest Research Institute report for Jan. 1973
[NASA-CR-130984] p0173 N73-18097
Studies of biomedical applications of NASA technology
[NASA-CR-130809] p0178 N73-18135
Applications of aerospace technology in biology and medicine
[NASA-CR-133226] p0334 N73-26067
Identification of feasible and practical applications of space teleoperator technology for problems of handicapped
[NASA-CR-133357] p0367 N73-27949
Application of aerospace medicine research in science and technology
[JPRS-59803] p0374 N73-29040
NASA bioinstrumentation list for public utilization
[NASA-SP-5958(01)] p0438 N73-32007
TEETH
Unified approach to biomechanics of dental implantology p0191 N73-19977
TEKTITE PROJECT
Recorded observations of crew member activities during Tektite 2 underwater habitability study
[NASA-CR-130034] p0140 N73-16094
TELECHIRICS
U REMOTE HANDLING
TELECOMMUNICATION
NT BIOTELEMETRY
NT COMMUNICATION

NT EDUCATIONAL TELEVISION
NT MULTICHANNEL COMMUNICATION
NT PULSE FREQUENCY MODULATION TELEMETRY
NT RADIO TELEMETRY
NT TELEMETRY
NT TELEPHONY
NT VOICE COMMUNICATION
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214
Feasibility determination of cutaneous communication system for working divers
[AD-750268] p0113 N73-15169
Satellite telecommunications systems for childhood education
[NASA-CR-133028] p0300 N73-25131

TELEMETERS
U TELEMETRY

TELEMETRY
NT BIOTELEMETRY
NT PULSE FREQUENCY MODULATION TELEMETRY
NT RADIO TELEMETRY
Telemetry and investigative methods in space biology
[NASA-TT-F-14996] p0338 N73-27057

TELEMETRY AUTO REDUCTION SYSTEM
U DATA REDUCTION
U TELEMETRY

TELEOPERATORS
Operation of spacecraft in orbit with the aid of remote-controlled manipulators - A joint project of ERNA, KYBERTRONIC, KLERA
[DGLR PAPER 72-098] p0584 A73-11659
An anthropomorphic master-slave manipulator system.
p0344 A73-37316
The oculometer in remote viewing systems.
p0344 A73-37320
Man-machine interface for controllers and end effectors.
p0344 A73-37325
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
Evaluation of human operator visual performance capability for teleoperator missions.
p0344 A73-37327
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills
p0344 A73-37328
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085
Computerized teleoperator manual control system for remote mechanical hand
p0602 N73-10143
Concept evaluation and subsystem analyses for design of remote controlled teleoperator visual system
[NASA-CR-124059] p0150 N73-17117
Development and evaluation of free flying teleoperators to include semiexoskeletal master control unit, joystick-analog unit, and three dimensional television system
p0261 N73-22925
Computerized teleoperator applications in manned aerospace systems
p0270 N73-23904
Conceptual design study for teleoperator visual system
[NASA-CR-124273] p0300 N73-25133
Identification of feasible and practical applications of space teleoperator technology for problems of handicapped
[NASA-CR-133357] p0367 N73-27949

TELEPHONY
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408

TELEVISION EQUIPMENT
A visual stimulator employing a T.V. raster display.
p0246 A73-30400

TELEVISION SYSTEMS
NT EDUCATIONAL TELEVISION
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
The oculometer in remote viewing systems.
p0344 A73-37320
Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation
p0389 A73-41216
Subjective tests of target acquisition time using television with image enhancement possibilities
[MBB-UFE-892-72-O] p0113 N73-15165

TELLURIC FIELDS
U ELECTRIC FIELDS

TEMPERATURE
NT AMBIENT TEMPERATURE
NT BODY TEMPERATURE
NT CRITICAL TEMPERATURE
NT GAS TEMPERATURE
NT HIGH TEMPERATURE
NT SKIN TEMPERATURE (BIOLOGY)
NT SURFACE TEMPERATURE
NT WATER TEMPERATURE

TEMPERATURE COMPENSATION
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649

TEMPERATURE CONTROL
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Influence of immersion in temperature controlled bath on circulation and water balance in human body
[NASA-TT-F-14834] p0185 N73-19124
Automatic temperature controller for liquid cooled garment based on total evaporative water loss during exercise
[NASA-TN-D-7311] p0299 N73-25126
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] p0334 N73-26071
Space shuttle environmental and thermal control/life support system
[NASA-CR-134009] p0415 N73-30091

TEMPERATURE DIFFERENCES
U TEMPERATURE GRADIENTS

TEMPERATURE DISTRIBUTION
Calculation of temperature distribution in the human body.
p0281 A73-31999
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature.
p0424 A73-43292

TEMPERATURE EFFECTS
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.
[AD-751735] p0576 A73-10163
Low body temperature effects on learned behavior retention under hibernation conditions in squirrels
p0078 A73-16324
Human perception of humidity under four controlled conditions.
p0089 A73-17864
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Effect of body temperature on ventilatory transients at start and end of exercise in man.

p0275 A73-31127
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure
p0288 A73-33695
Temperature conditions and blood supply of the brain in animals
p0304 A73-34229
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Ambient temperature rise effects on pilot performance in a flight simulator
p0331 A73-36948
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725
Numerical analysis of thermal resistance of air layers in air permeable clothing
[MLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089
Cyclically changing temperature effects on monitoring behavior and physiological responses of man
[AD-748451] p0104 N73-14110
Ultraviolet radiation, X rays, freezing, and thawing effects on ribonuclease
p0185 N73-19120
Temperature interrelationships between rat brain tissues and cerebral blood supply
p0372 N73-29026
Role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072

TEMPERATURE FIELDS
U TEMPERATURE DISTRIBUTION

TEMPERATURE GRADIENTS
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054
Radiation heat transmission from human underlying and surface skin effect on epidermal temperature gradient
p0428 A73-44217
Sterilization parameters for spacecraft
[NASA-CR-129272] p0065 N73-12101
Physiological effects on rats of replacement of atmospheric nitrogen by inert gases at high and low temperatures
p0216 N73-20095

TEMPERATURE INDICATORS
U INDICATING INSTRUMENTS
U TEMPERATURE MEASURING INSTRUMENTS

TEMPERATURE INSTRUMENTS
U TEMPERATURE MEASURING INSTRUMENTS

TEMPERATURE INVERSIONS
NT CENTRIFUGING STRESS

TEMPERATURE MEASUREMENT
Muscle, skin and esophageal temperature measurement during transient and steady state phases of negative work exercise on bicycle ergometer
p0048 A73-14112
Telemetric measurement of local blood flow by heat conduction probes.
p0052 A73-14282
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
Circuit technology of a temperature-measurement transmitter for biotelemetric applications
p0239 A73-28575
A simplified method of calculating thermodilution curves
p0276 A73-31168

TEMPERATURE MEASURING INSTRUMENTS
NT THERMOMETERS
Digital temperature-measuring device for medical applications
p0236 A73-28338
Thermographic evaluation of relative heat loss areas of man during cold water immersion.
p0325 A73-36781
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ABC-10583-1] p0101 N73-14093

TEMPERATURE PHOTOMETERS
U TEMPERATURE MEASURING INSTRUMENTS

TEMPERATURE SENSORS
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions
p0395 A73-42055

TEMPERATURE TRANSDUCERS
U TEMPERATURE MEASURING INSTRUMENTS
U TEMPERATURE SENSORS

TENDONS
Human tendon stress recovery after load removal as function of time, sex, age and side differences
p0119 A73-20033
Organization of spontaneous muscular activity in man
p0157 A73-22863
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42679

TENSOR ANALYSIS
Strength limits correlation to modulus of elasticity for compact bone material from compression tests, noting anisotropy tensor analysis
p0045 A73-13744

TERNARY SYSTEMS (DIGITAL)
U DIGITAL SYSTEMS

TERPENES
Volatile terpenoids from aeciospores of Cronartium fusiforme.
p0206 A73-27145

TERRESTRIAL MAGNETISM
U GEOMAGNETISM

TEST BEDS
U TEST EQUIPMENT

TEST CHAMBERS
NT HYPERBARIC CHAMBERS
NT PRESSURE CHAMBERS
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963

TEST EQUIPMENT
Design of electrophoretic mass screening tester for sickle cell anemia
p0231 N73-21140

TEST FACILITIES
Unique field-laboratory methodology for assessing human response to noise
[NASA-CR-2221] p0176 N73-18124

TEST PILOTS
Psychiatric and psychometric predictability of test pilot school performance.
[AD-754148] p0050 A73-14165

TESTERS
U TEST EQUIPMENT

TESTES
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphological changes in testes and spermatogenesis process of dogs subjected to chronic and combined gamma irradiation
p0134 N73-16048

TESTING MACHINES
U TEST EQUIPMENT
TEXTURES
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180
THALAMUS
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
Intranuclear organization of the center median nucleus of the thalamus.
p0240 A73-29175
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
Two visual systems in the frog.
p0389 A73-41302
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958
Anatomic and functional organization of the ventral anterior and reticular nuclei of the thalamus
p0429 A73-44675
Thalamic cat cell activities during sleep and wakefulness phases
p0257 N73-22030
THEMATIC MAPPING
A study of the statistical patterns of visual perception of a black and white raster image
p0385 A73-40861
THEOREMS
NT BAYES THEOREM
THEORETICAL PHYSICS
NT QUANTUM THEORY
Relationship of theoretical physics to molecular biology, considering synthesis, ontogenesis, phylogenesis, evolution models, thermodynamic applications and Eugen prebiological evolution theory
p0281 A73-31823
THERAPY
NT CHEMOTHERAPY
NT PSYCHOTHERAPY
NT RADIATION THERAPY
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
Hemotherapy of coagulation system disturbances of hepatolienal origin
p0428 A73-44299
Absorption of fructose in saline mixture used for enteritis therapy of children
[NASA-TT-F-14596] p0609 N73-11078
Therapeutic value of mineral water diets especially Karlsbad Muhlbrunn water
[NASA-TT-F-14620] p0069 N73-13079
Oxygen breathing in decompression sickness and remedial recompression of human beings
[DRIC-TRANS-3095] p0334 N73-26069
Extreme aeroembolism case and successful therapy in hyperbaric chamber
p0368 N73-27959
Use of therapeutic exercise for treatment of functional vascular disorders and occlusive lesions of arteries and veins
[NASA-TT-F-15043] p0374 N73-29045
THERMAL ABSORPTION
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533
THERMAL AGITATION
U THERMAL ENERGY
THERMAL COMFORT
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
Thermal comfort - New directions and standards.
p0325 A73-36785
THERMAL CONTROL COATINGS
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987
THERMAL DECOMPOSITION
U PYROLYSIS
THERMAL DEGRADATION
Microorganism heat sterilization process design and control based on logarithmic thermal destruction and Bigelow temperature coefficient models, determining lethality by statistical procedure
p0288 A73-33695
THERMAL DIFFUSION
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217
THERMAL EFFECTS
U TEMPERATURE EFFECTS
THERMAL ENERGY
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
THERMAL ENVIRONMENTS
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993
Human performance at elevated environmental temperatures.
p0325 A73-36787
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc
p0406 A73-42861
Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994
THERMAL INSULATION
Calculation of thermal resistance of air layers in air permeable clothing for reliable design
[AD-746037] p0612 N73-11099
Examination of physical processes governing heat transfer through air-penetrable clothing in wind
[DRIC-TRANS-2921] p0113 N73-15166
Cryogenic insulation of liquid oxygen dewars for aircraft pilot breathing masks
[AD-763325] p0421 N73-31026
THERMAL POLLUTION
Man induced changes in earth climate by environment pollution and heat production
[PB-213676/2] p0267 N73-23074
THERMAL PROPERTIES
U THERMODYNAMIC PROPERTIES
THERMAL PROTECTION
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
Bioassay method for thermal protective clothing fabrics evaluation, measuring skin damage with various fabric combinations under exposure to calibrated flame source
p0285 A73-32671
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
THERMAL RADIATION
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
Sterilization technology in the United States space program.
p0288 A73-33697
THERMAL RESISTANCE
The nature of chemoreception in posterior

hypothalamic structures
p0382 A73-40279
Thermal resistance of clothing noting radiative body heat transfer, air layers, and clothing thickness
[DRIC-TRANS-2920] p0067 N73-12117
THERMAL SIMULATION
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
THERMAL STABILITY
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions
p0395 A73-42055
THERMAL STRESSES
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Thermal stress and mechanical shock effects on release of bacterial spores from stainless steel surfaces with application to Mars landing
[NASA-CR-133868] p0416 N73-30987
Effect of high ambient temperature on calcium content of human bone tissue
p0444 N73-33033
THERMOCHEMICAL PROPERTIES
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429
THERMOCHEMISTRY
Thermal combustion requirements for burner devices of human vegetative waste products
p0184 N73-19111
THERMOCOMPRESSION
U HEATING
THERMODYNAMIC EQUILIBRIUM
Human thermoregulatory system examination under thermodynamic equilibrium based on conductive and convective metastable heat transfer from skin to environment
[ASME PAPER 73-AUT-J] p0240 A73-29414
THERMODYNAMIC PROPERTIES
NT CRITICAL TEMPERATURE
NT EMISSIVITY
NT ENTHALPY
NT ENTROPY
NT THERMAL DIFFUSION
NT THERMAL STABILITY
NT THERMOCHEMICAL PROPERTIES
NT VOLATILITY
Thermal response of protective fabric/human skin system to JP-4 jet fuel fire
[AD-759525] p0337 N73-26095
THERMODYNAMICS
A non-equilibrium thermodynamical analysis of the origin of life.
p0090 A73-17931
Thermodynamics of self assembly - An empirical example relating entropy and evolution.
p0090 A73-17932
Biological order, structure and instabilities in terms of irreversible thermodynamic processes, entropy, dissipative structures, randomness, abiogenesis, hierarchic organization, chemical reactions and molecular biology
p0281 A73-31824
THERMOELECTRIC CONVERSION SYSTEMS
U THERMOELECTRIC POWER GENERATION
THERMOELECTRIC POWER GENERATION
Extraterrestrial disposal of radioactive waste from thermoelectric propulsion
[NASA-TM-X-62272] p0366 N73-27943
THERMOGRAMS
U RECORDING INSTRUMENTS
U TEMPERATURE MEASURING INSTRUMENTS
THERMOGRAPHS
U RECORDING INSTRUMENTS
U TEMPERATURE MEASURING INSTRUMENTS
THERMOMECHANICS
U THERMODYNAMICS
THERMOMETERS
Portable electronic thermometer for temperature measurement during exercise elevation of body temperature in heat acclimatization experiment
p0169 A73-24567
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512
THERMOMETRY
U TEMPERATURE MEASUREMENT
THERMOPHILES
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
THERMOPHILIC PLANTS
NT BLUE GREEN ALGAE
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503
THERMOPHYSICAL PROPERTIES
NT CRITICAL TEMPERATURE
NT EMISSIVITY
NT THERMAL DIFFUSION
NT THERMAL STABILITY
NT VOLATILITY
THERMOPHYSICS
U THERMODYNAMICS
THERMOPLASTIC FILMS
U POLYMERIC FILMS
THERMORECEPTORS
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Differential thermal sensitivity in the human skin.
p0251 A73-30912
THERMOREGULATION
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
Heat flow meter and calorimeter measurements of heat transfer between human body and environment under various climatic conditions for temperature regulation studies
p0049 A73-14123
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels.
p0077 A73-16151
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Thermoregulatory reactions of animals in a helium-oxygen medium
p0088 A73-17695
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere
p0123 A73-20979
Energy requirements of ouabain-sensitive Na-K positive ion membrane pump during norepinephrine induced thermogenesis of brown adipose tissue in cold-exposed hamsters
p0156 A73-22649
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Cerebral temperature oscillations and vascular responses in man
p0164 A73-23805
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Hypothalamus, septum and ventrobasal thalamus nuclei single neuron responses to skin thermal stimulation, indicating afferent connections between cerebrum thermoregulation center and peripheral thermoreceptors
p0199 A73-26086
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.

p0239 A73-28535
Human thermoregulatory system examination under thermodynamic equilibrium based on conductive and convective metastable heat transfer from skin to environment
[ASME PAPER 73-AUT-J] p0240 A73-29414
Differential thermal sensitivity in the human skin.
p0251 A73-30912
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657
Tolerance to heat following cold stress.
p0325 A73-36784
Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252
Model of evaporation responses to heat load increases
p0352 A73-38150
Brain calcium - Role in temperature regulation.
p0353 A73-38294
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600
Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
Book on comparative physiology of thermoregulation covering primitive and aquatic mammals, torpidity aspects, evolution and newborns
p0406 A73-42859
Primitive mammals phylogeny relationship to homeothermic abilities, discussing body temperature, thermoregulation, basal metabolism rates, hibernation, nychthemeral rhythms and responses to heat and cold
p0406 A73-42860
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc
p0406 A73-42861
Torpor and hibernation physiology in mammals covering evolution, hypothermia, energy conservation, cell and organ adaptations, nervous and cardiovascular system changes, etc
p0406 A73-42862
Thermoregulation evolution in various animals, discussing body size and composition effects, body temperature variations, control mechanisms, heat loss and production, behavior and ontogeny
p0406 A73-42863
Spinal cord heating effects on frog thermoregulatory behavior in aqueous thermal gradient, noting preference for colder ambient temperature
p0426 A73-43994
Metabolic and myoelectric reactions under chemical thermoregulation in rats after accelerated cold adaptation
p0430 A73-44721
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
Sweat rate and heat conductance in thermoregulatory system during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074
Heat regulation and adaptation of rats exposed to helium oxygen atmosphere
p0065 N73-12096
Thermoregulation reactions of rats in hypoxic atmosphere with nitrogen and helium dilution
p0134 N73-16046
Helium/oxygen breathing effects on rat gas exchange and musculoskeletal heat control
p0182 N73-19093
Low barometric pressure effects on human thermoregulation function
p0254 N73-21996
Hypothalamus as internal heat regulator for warm-blooded animals
[NASA-TT-F-15138] p0437 N73-32002
Physical fitness effects on human thermoregulation during exercise
[NASA-TT-F-15142] p0437 N73-32003

THERMOSTABILITY
U THERMAL STABILITY

THERMOTROPISM
U TEMPERATURE EFFECTS

THIAMINE
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392
Effect of accelerations on thiamine S-35 distribution in organs, tissues, and subcellular structures of white mice
p0133 N73-16044
Influence of cysteamine hydrochlorine and vitamin B and C prophylaxis on radiation sickness in humans
p0214 N73-20078
Synthesis rate of phospholipids and cytochromes b5 and P 450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064

THIN FILMS
Thin film temperature sensor with polymer coating for medical research providing good sensitivity and stability for rapid temperature changes in biochemical reactions
p0395 A73-42055

THINNERS
U SOLVENTS

THIOLS
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Effects of antiradiation drug dosage on mice and rat tolerance to transverse acceleration overloads
p0211 N73-20055
Resistance of mice to acceleration overloads after injection of aminothiol group radioprotector
p0211 N73-20056
Pharmacological data for aminothiol and indolylalkylamine radioprotectors
p0212 N73-20066
Aminothiol radioprotector, finam, effect on irradiated animal tissues under various conditions
p0215 N73-20085

THIURONIUM
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586

THORAX
Volume-pressure characteristics of rib cage-diaphragm interaction in standing subjects during voluntary relaxation
p0359 A73-39778
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249

THREE DIMENSIONAL MOTION
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094

THRESHOLD GATES
Threshold circuits with feedback channels for

cardiac R-wave detection in electrocardiographic heart rate monitoring
[NASA-TN-D-7152] p0112 N73-15158
THRESHOLD LOGIC
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902
THRESHOLDS (PERCEPTION)
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis.
p0585 A73-12077
Scotopic vision - An unexpected threshold elevation produced by dark annuli.
p0585 A73-12080
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787
Probability estimate for visual target detection in terms of luminance threshold and target size and duration
p0093 A73-18242
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625
Dynamic properties of vision. III - Twin flashes, single flashes and flickerfusion.
p0120 A73-20253
Stimulus effect on spatial summation of color receptive pathways and discrimination thresholds as function of color, gradient, retinal illumination and field size
p0120 A73-20254
Electrical stimulation effects of human eye on photic threshold for square wave vision as function of wavelength, orientation and spatial frequency
p0121 A73-20260
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception
p0121 A73-20262
Saccadic suppression for structured background as function of visual image pattern and threshold detection elevation in central nervous system
p0121 A73-20267
Psychophysical areal summation and stimulus contour and threshold visibility effects on size selective adaptation in human vision for single- and multichannel models
p0128 A73-21563
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity.
p0153 A73-21897
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
Visual acuity as a function of exposure duration.
p0165 A73-23838
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716

The effects of edge sharpness and exposure duration on detection threshold.
p0204 A73-26718
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Interaural difference thresholds in binaural perception of signals nonexistent in normal acoustic environment, considering beats, memory, learning, and stereophony
p0244 A73-30285
Influence of the dazzling of an eye on the state of adaptation of the congeneric eye in a normal subject
p0245 A73-30388
Foveal threshold additivity measurements for monochromatic and mixed light, using grating resolution as brightness criterion
p0246 A73-30398
Subjective brightness contrast lack of correlation with steady state evoked potential amplitude in suprathreshold stimuli range
p0275 A73-31017
Threshold and suprathreshold perceptual color differences.
p0275 A73-31019
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies.
p0308 A73-34839
Hearing conservation studies covering impulse noise produced threshold shift, damage risk criteria, ultrasound hazards and hearing protection
p0309 A73-35326
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600
Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601
Disparity detectors in human depth perception - Evidence for directional selectivity.
p0383 A73-40413
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Eigenvectors of the sensitivity variations across the human central fovea.
p0407 A73-42957
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343
Visual perception dominance over touch related to threshold changes, analyzing nervous system reliance on sense with lower threshold
p0425 A73-43847
Blockage effect in external ear canal on diver auditory perception threshold
[AD-751664] p0177 N73-18132
Audiometric thresholds for bare headed subjects, or wearing M1 helmet, and experimental helmet
[AD-745121] p0260 N73-22053
Effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123

Middle ear muscle reflex thresholds to various aircraft noises
[AD-764739] p0446 N73-33048

THROMBOCYTES
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation
p0208 A73-27713
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high-mountain conditions
p0217 N73-20107

THROMBOSIS
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
The complications of coronary arteriography.
p0399 A73-42343
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease.
p0405 A73-42829

THRUST CHAMBERS
Electrically conducting ceramics to heat biowaste propellants to 2000 K in resistojet thrustors for space station application
[NASA-CR-112159] p0112 N73-15161

THYROID GLAND
Radioisotopic T-3 and T-4 thyroid function tests in the pig-tailed monkey /Macaca nemestrina/.
p0588 A73-12548
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular
p0157 A73-22926
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283
Response of pituitary-thyroid axis to microwave radiation
[VR-3490-149] p0107 N73-15122

THYROXINE
Radioisotopic T-3 and T-4 thyroid function tests in the pig-tailed monkey /Macaca nemestrina/.
p0588 A73-12548
High altitude chamber effect on thyroid stimulating hormone and thyroxine concentrations, noting shift from extra to intravascular
p0157 A73-22926
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760

TILT
U ATTITUDE (INCLINATION)

TILTING
U ATTITUDE (INCLINATION)

TIME
NT FLIGHT TIME
NT REACTION TIME
NT TRANSIT TIME
Influence of time zones on physiological organs and systems and performance of athlete
[NASA-TT-F-14632] p0073 N73-13116

TIME CONSTANT
NT PERCEPTUAL TIME CONSTANT
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730

TIME DEPENDENCE
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
Visual acuity as a function of exposure duration.
p0165 A73-23838
The dependence of the negative afterimage on the duration of the stimulus and the stimulus intensity
p0204 A73-26550
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays.
p0234 A73-28095
A simplified method of calculating thermodilution curves
p0276 A73-31168
Visual responsiveness repeat variability magnitude during prolonged sessions and time of day
p0357 A73-39479
Human recognition of dynamic pattern changes in numerical series displayed on spatiotemporal panels, discussing learning times and reactions to pattern disruptions
p0393 A73-41887
Time periods for nutrient solution exchange in optimal biomass yield on porous aggregate
p0183 N73-19106
Influence of N-type sound wave pressure rise time on guinea pig cochlear and acoustically evoked potentials
[ISL-31/72] p0365 N73-27940

TIME DISCRIMINATION
Verbal estimates of perceived time of flashing lights interval, relating to lights separation distance
p0044 A73-13552
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent.
p0085 A73-17199
Estimation of the passing of four consecutive hours.
p0086 A73-17524
Statistical distribution methods for analyzing formation of reflexes conditioned to time intervals between periodic unconditioned stimuli
p0093 A73-18166
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
Effect of carbon monoxide on time perception.
p0381 A73-40000
Sufficient conditions for the discrimination of motion.
p0388 A73-41181

TIME DIVISION MULTIPLEXING
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279

TIME LAG
Space-time adaptation of visual position constancy.
p0304 A73-34223
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
Response delays and the timing of discrete motor responses.
p0387 A73-41177
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166
Human psychomotor performance circadian rhythm variations after transmeridian flight noting time shift effect
[DLR-FB-73-52] p0421 N73-31022

TIME LAPSE PHOTOGRAPHY
U CHRONOPHOTOGRAPHY

TIME MEASUREMENT
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects. p0118 A73-19932
Differential velocity effects on converging target intersection time estimation accuracy, considering plane conditions and air traffic controller experience p0285 A73-32900
Vertical arm reaching movements for various gravitational levels, measuring reach time and angular and lower arm velocities p0424 A73-43218
Psychophysical functions of range and time estimates by ground and aerial observers [AD-747271] p0071 N73-13094
TIME RESPONSE
EEG late photoreceptor potential components time course in macaque monkey cones and rods, noting pure cone foveal response p0046 A73-13761
Combined effects of noise and vibration on human tracking performance and response time. [AD-759329] p0196 A73-25334
Forced guidance and distribution of practice in sequential information processing. p0201 A73-26319
Opponent-colors responses in the visually evoked potential in man. p0308 A73-34844
Interactive effects of intense noise and low-level vibration on tracking performance and response time. p0386 A73-41153
Response delays and the timing of discrete motor responses. p0387 A73-41177
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light p0425 A73-43791
Effect of carbon monoxide on time perception [PB-214651/2] p0299 N73-25123
TIME SERIES ANALYSIS
Operator remnant power spectral density measurement during compensatory tracking task by serial segments method, noting Fourier coefficient processing p0578 A73-10324
Vector summation dial for analysis of time-nonstationary cyclic biological data, applying to peak time change detection and random walks p0049 A73-14120
Status and prospects of EEG spectral analysis. p0058 A73-15278
Automatic analysis and classification of electroencephalograms p0309 A73-34966
Serial correlation of physiological time series and its significance for a stress analysis p0352 A73-38159
TIMING
U TIME MEASUREMENT
TISSUES (BIOLOGY)
NT ENDOTHELIUM
NT EPITHELIUM
NT NEUROGLIA
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues p0576 A73-10156
Effects of immersion with the head above water on tissue nitrogen elimination in man. p0589 A73-12563
Intensity of exercise and heart tissue catecholamine content. p0042 A73-13498
Experimental determination of shear moduli in a compact bone tissue p0045 A73-13742
A criterion for oxygen supply optimality in tissues and the capillary circulation rate p0047 A73-13821
DNA catabolism in rat tissues in response to transverse accelerations p0087 A73-17679
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure p0087 A73-17685
Russian book - Tissue, oxygen in the presence of extremal flight factors. p0116 A73-19425
A model for the elastic properties of the lung and their effect on expiratory flow. p0126 A73-21502
Effect of training on enzyme activity and fiber composition of human skeletal muscle. p0127 A73-21508
Gas dynamic theory of gas exchange in organisms based on oxygen and carbon dioxide permanent partial pressure gradients in tissues, blood and lungs p0169 A73-24523
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta p0193 A73-25042
Brain tissue functional organization based on models for cell pseudorandom behavior, information processing, learning and memory, considering spontaneous wave and unit firing p0194 A73-25143
Biochemical and morphological studies of lunar material effects on plant tissue culture cells, noting nonpathological increased cellular activity and chloroplast and cytoplasm changes p0202 A73-26482
Response of tobacco tissue cultures growing in contact with lunar fines. p0203 A73-26483
Mammalian tissue response to subcutaneous and intraperitoneal injection of aqueous suspensions of lunar fine material, noting insolubility in tissue and irritant action p0203 A73-26484
Water and salt metabolism in hypokinesia-subjected animals p0207 A73-27704
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man p0234 A73-27996
Protein and nucleic acid contents in animal tissues under hypokinesia p0279 A73-31503
Temperature conditions and blood supply of the brain in animals p0304 A73-34229
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460
Histopathological and histochemical studies of one year isolation and six months immobilization effects on rhesus monkeys internal organs and tissues p0314 A73-35983
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973. p0315 A73-36428
Changes in respiration effectiveness during muscular activity p0323 A73-36580
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains p0323 A73-36581
Continual mechanochemical model of muscular tissue p0381 A73-40182
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat. p0390 A73-41620
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism p0402 A73-42660
Polyparametric information of the electrocardiogram in injured tissue. p0405 A73-42834

A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature.
p0424 A73-43292
Spectral emissivity of skin and pericardium.
p0427 A73-44213
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430
Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[COO-3162-9] p0070 N73-13091
Gas chromatographic analysis of beryllium in aqueous solutions and biological tissues
[AD-753112] p0177 N73-18131
Hyperoxic morphological changes in connective rat tissues
p0182 N73-19092
Aminothiol radioprotector, finam, effect on irradiated animal tissues under various conditions
p0215 N73-20085
Combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090
Effect of hypokinesis of varying duration on fluid-electrolyte metabolism and composition in blood and tissues of animals
p0216 N73-20098
Microdosimetric pattern of galactic heavy primaries dissipation in tissues during space flight
[NASA-CR-131467] p0230 N73-21132
Effects of hydrostatic water bath pressure on capillary blood pressure and connective tissue dehydration
[NASA-TT-F-14894] p0265 N73-23052
Development of germ-free plants and tissues
[NASA-CR-128947] p0293 N73-24122
Vacuum/tissue interface effect on biological energy absorption from charged particle track
p0372 N73-29028
Effects of oxygen pressure on tissues under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065

TITANIUM
Bibliography on titanium toxicity in human and animal organisms
[ORNL-TIP/TIRC-72-65] p0186 N73-19135

TITRATION
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169

TOBACCO
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Cigarette-smoking and coronary atherosclerosis.
p0320 A73-36535
Effects of Apollo 12 lunar materials on lipid levels, including fatty acids and sterols, of tobacco tissue and slash pine cultures
[NASA-CR-128606] p0591 N73-10063
Effect of cigarette smoking on sensory perception and performance parameters of flight crews
[AD-754421] p0267 N73-23071

TOLERANCES (PHYSIOLOGY)
NT ACCELERATION TOLERANCE
NT ALTITUDE TOLERANCE
NT COLD TOLERANCE
NT HEAT TOLERANCE
NT HUMAN TOLERANCES
NT RADIATION TOLERANCE
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Effect of maximal work load on cardiac function.
p0288 A73-33991
Tolerance of hypokinetic rats to carbon monoxide exposure
p0264 N73-23043

TONE
U PITCH

TONOMETRY
U INTRAOCULAR PRESSURE
U PRESSURE MEASUREMENTS

TONUS
U MUSCULAR TONUS

TOOLS
Bibliography on effects of underwater environment on tools, equipment, and human performance
[AD-748000] p0074 N73-13122

TOPOLOGY
NT METRIC SPACE

TORSIONAL STRESS
Torsional elasticity of human skin in vivo.
p0391 A73-41625

TORSO
Redintegrated somatotyping technique for physique measurement and classification based on limb and torso photographic diameter integration with height, using photoelectric cell and electronics
p0096 A73-18474

TOUCH
NT TACTILE DISCRIMINATION
Psychological test for relative contributions of specific and nonspecific components to intersensory transfer between vision and touch
p0043 A73-13525
Teleoperator system incorporating touch feedback and sequenced automatic control for experimental investigation of human touch sensing relation to manipulative skills
p0344 A73-37328
Use of skin analyzer as communication channel in controlling activity
p0069 N73-13074
Tactile information presentation using high pressure pulses into anti-G suit
[AD-761796] p0369 N73-27969
Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] p0439 N73-32013

TOWED BODIES
Human physiological responses to high speed aerial tow.
p0330 A73-36939

TOWED TARGETS
U TARGETS
U TOWED BODIES

TOWERS
NT AIRPORT TOWERS

TOWNSEND AVALANCHE
Electroradiography technique involving photoproduction of free electrons via Townsend avalanche amplification in diode /triode/ gap, noting increased quantum efficiency
p0427 A73-44214

TOWNSEND SURFACES
U TOWNSEND AVALANCHE

TOXIC DISEASES
NT CARBON MONOXIDE POISONING
NT LEAD POISONING
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
Protective effects of pyridinium salts against alkyl phosphate poisoning including influence of chemical and aging
[BMVG-FBWT-72-8] p0137 N73-16072

TOXIC HAZARDS
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
Hydrazine derivative poisoning in industry and clinical medicine treatments, noting causes of vitamin B6 deficiency
p0165 A73-23819
The acute inhalation toxicology of chlorine pentafluoride.
p0282 A73-32173
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
Effect of protective barrier creams on toxic alkyl phosphate penetration of pig skin

[BNVG-FBWT-72-15] p0138 N73-16076
Influence of 100 percent anhydrous ammonia environment on body functions p0147 N73-17088
Phenol preservative for reducing toxic urine outgassing into air environment p0183 N73-19098
Hypoxia adaptation of rats for increased resistance to toxic atmospheric gases p0183 N73-19100
Toxic effects of metabolic waste gases on rat organisms p0183 N73-19101
Toxic effect of indole inhalation on man, mouse, rat, and rabbit organisms p0183 N73-19102
Toxic effects of human exhaled air on mice organisms p0183 N73-19103
Microbiological inspections of NASA food handling facilities
[NASA-TM-X-64734] p0220 N73-20127

TOXICITY
NT CARBON MONOXIDE POISONING
NT LEAD POISONING
Analysis of volatile combustion products and a study of their toxicological effects. p0587 A73-12429
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions. p0155 A73-22537
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain. p0357 A73-39481
Toxic effects of continuous exposure to dichloromethane vapor on dogs, monkeys, rats, and mice
[AD-746295] p0611 N73-11088
Human and male Charles River rat exposures to Halon 1301 under hypobaric conditions, simulating aircraft compartment
[AD-747958] p0066 N73-12106
Effects of SO2 decay product toxicity on human physiological functions p0099 N73-14071
Hyperammonemia development in metabolic toxicity of hydrazine
[AD-749519] p0100 N73-14077
Oxygen, carbon monoxide, and fuel toxicity p0105 N73-15101
Symptomatic and pathological information from acute toxicity exposure of chlorine pentafluoride
[AD-751452] p0138 N73-16078
Toxicity of pyrolysis products from chlorotrifluroethylene-ethylene copolymer Halar resin
[AD-751436] p0138 N73-16080
Hepatotoxic effects of dichloromethane inhalation in mice
[AD-751434] p0138 N73-16081
Acute toxicity of brief exposures to HF, HCl, NO2, and HCN singly and in combination with CO in aircraft cabins
[AD-751442] p0139 N73-16085
Animal species susceptibility to toxic effects of long term exposure to environmental monomethylhydrazine
[AD-751441] p0139 N73-16086
Biological and toxicity effects of aluminum and other chemicals in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136
Elimination of toxic cysteamine in organisms and method for prolonging its radioprotective effect p0213 N73-20069
Gamma radiation effects on toxic cysteamine elimination in irradiated and nonirradiated mice p0213 N73-20070
Opthalmological examination of antimalarial drugs effects on performance of navigation personnel p0228 N73-21122
Acute and subacute inhalation toxicity experiments with organic solvents, rocket propellants, and various hydrocarbons in confined environments
[NASA-CR-131675] p0259 N73-22043
Space flight ultraviolet irradiation effects on Bacillus thuringiensis toxin production capability p0291 N73-24109
Combustibility and toxicity of metals and alloys
[AD-764287] p0418 N73-31003

TOXICITY AND SAFETY HAZARD
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions. p0329 A73-36930
Industrial health hazard in chronic exposure to monomethylhydrazine and dose related hemolytic anemia in humans
[AD-751440] p0139 N73-16087
Cardiac toxicity of fluoroalkane gases for propelling aerosols in industry and household applications
[AD-751425] p0140 N73-16090
Evaporation rates and toxic plume dispersion for defining downwind evacuation areas for populations adjacent to accidental propellent spills on shipping routes
[NASA-TM-X-68188] p0141 N73-16097
Environmental health measures to prevent cabin atmosphere toxicity and provide drinking water standards in manned space flight applications p0144 N73-17058
Toxicity and safety hazard of dry beryllium copper alloy machining for human operator p0144 N73-17059
Effects of chemical fire extinguishing agents containing bromotrifluoromethane on cardiovascular and nervous systems of dogs, monkeys, and baboons
[AGARD-R-599] p0149 N73-17106
Toxic effects of chronic exposure to dichloromethane in liver microsomal cytochromes
[NASA-TM-X-69101] p0176 N73-18128
Toxicity of atmospheric dichloromethane levels in simulated space cabin atmosphere on dogs, rats, mice, and monkeys
[NASA-TM-X-69099] p0177 N73-18129
Toxicity of long term methyl isobutyl ketone exposure in dogs, monkeys, mice, and rats
[NASA-TM-X-69100] p0177 N73-18130
Toxicity of gaseous urine and feces emissions on rat organism p0182 N73-19097
Bibliography on titanium toxicity in human and animal organisms
[ORNL-TIP/TIRC-72-65] p0186 N73-19135
Transverse acceleration overload effects on mice sensitivity to toxic doses of cysteamine and aminothiol group antiradiation drugs p0212 N73-20061
Increased toxicity of sympathomimetic amine stimulants on spinal reflexes in irradiated frogs p0212 N73-20063
Pharmacological data for aminothiol and indolylalkylamine radioprotectors p0212 N73-20066
Toxicological properties of rocket exhaust products and blood analysis for beryllium oxide content
[AD-754936] p0220 N73-20131
Hygienic importance and toxicity of manganese oxides, and clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067
Toxicological aspects of carbon dioxide exposure in chronic hypercapnia
[AD-763394] p0418 N73-31005

TOXICOLOGY
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid. p0238 A73-28503
Development and reversibility of pulmonary oxygen poisoning in the rat. p0247 A73-30516
Toxicology of some commercial fluorocarbons
[AD-751429] p0138 N73-16079
Effect of toxic substances on algae by observing photosynthesis determined by oxygen production of algae
[DRIC-TRANS-2991] p0187 N73-19139
Effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123

TOXINS AND ANTITOXINS
NT ENDOTOXINS
Cholinesterase reactivator as antidote in human organophosphate poisoning p0254 N73-21998

TRACE CONTAMINANTS
Skylab medical experiments altitude test /SMEAT/

chamber atmosphere trace contaminants analysis, describing sample acquisition techniques and instrumentation
[ASME PAPER 73-ENAS-45] p0351 A73-37992
TRACE ELEMENTS
Twin spectrograph measurements at 2520-3375 A of metal trace elements in biological sample solutions
p0088 A73-17692
Spectrometric determination of copper, iron, cobalt, nickel, and manganese complexes in biological samples
p0256 N73-22022
TRACERS
Accuracy of various tracer methods for measuring body water compartments during bed rest
[NASA-TR-R-406] p0295 N73-24133
TRACKERS
U TRACKING (POSITION)
TRACKING (POSITION)
NT COMPENSATORY TRACKING
NT OPTICAL TRACKING
NT PURSUIT TRACKING
NT RADIO TRACKING
NT SATELLITE TRACKING
NT WILDLIFE RADIOLOCATION
A method for aiding human operator performance in a noncompensatory tracking task.
p0578 A73-10323
Step input tracking experiment for testing human psychological refractory period, noting directional error correcting reaction time similarities with keyboard tasks
p0095 A73-18470
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Simulator facility used to determine vibration effects on pilot tracking performance using rigid control stick
[AD-745193] p0605 N73-10164
Human operator model performance in tracking high performance aircraft
[AD-746725] p0072 N73-13101
TRACKING STATIONS
Work-rest schedules for military tracking crews under prolonged vibration
p0271 N73-23986
TRACKING STUDIES
U TRACKING (POSITION)
TRACTORS
Effect of low visibility on performance of vehicle operators
[AD-749248] p0260 N73-22051
TRAFFIC CONTROL
NT AIR TRAFFIC CONTROL
TRAINEES
U STUDENTS
TRAINERS
U TRAINING DEVICES
TRAINING
U EDUCATION
TRAINING AIRCRAFT
Evaluation of standardized angle of attack flight training system
[AD-757243] p0269 N73-23090
TRAINING DEVICES
Computer-controlled differential review-time payoff as a training aid.
p0083 A73-16725
Performance measurement system for combat crew flight training in complex aircraft weapon systems, identifying training research goals
p0083 A73-16726
Performance evaluation of airborne audio-video recording system as training device in A-7D tactical fighter
[AD-744041] p0605 N73-10161
Systems engineering methods for human performance enhancement in signal detection and flight control
[AD-748239] p0102 N73-14098
Effectiveness of training device for air traffic communication and carrier landing control
[AD-751556] p0141 N73-16101
Evaluation of device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103
Performance evaluation of training devices for developing human physical fitness
[NASA-CR-134046] p0440 N73-32023
TRAINING SIMULATORS
NT FLIGHT SIMULATORS
Jet procedures trainer for pilot transition from straight wing propeller plane to swept wing jets, discussing pilot instruction and selection
p0275 A73-31095
TRAJECTORIES
NT PARTICLE TRAJECTORIES
TRANQUILIZERS
Psychopharmacology in treating psychiatric diseases, negative emotions, and nerve stimulation, discussing tranquilizers synthesis and effects
p0207 A73-27497
Residual effects of hypnotic drugs on human nervous function and performance
p0226 N73-21106
Pilot performance under certain hypnotic, tranquilizer, and barbiturate type drugs
p0227 N73-21110
Spectral analysis on human biorhythmic performance to evaluate tranquilizer effects
p0228 N73-21116
Flight safety factors in prescribing tranquilizing drugs for flying personnel
p0228 N73-21123
Comparison of alcohol and dizepam effects on human mental and psychomotor functions
p0229 N73-21126
Stimulating and tranquilizing drug effects on human performance indices
p0256 N73-22021
TRANSCONTINENTAL SYSTEMS
Resynchronization of circadian rhythms following transmeridian flight observed in two groups of students
p0368 N73-27958
Effects of two sequential transatlantic flights on circadian rhythm of body function and performance
p0369 N73-27964
Time shift effects on human 17-hydroxy corticosteroid diurnal excretion noting transmeridian flights
[DLR-FB-73-58] p0412 N73-30070
TRANSDUCERS
NT ELECTROACOUSTIC TRANSDUCERS
NT ELECTRONIC TRANSDUCERS
NT LOUDSPEAKERS
NT MICROPHONES
NT PIEZOELECTRIC TRANSDUCERS
NT PIEZORESISTIVE TRANSDUCERS
NT PRESSURE SENSORS
NT SOUND TRANSDUCERS
NT ULTRASONIC WAVE TRANSDUCERS
Measuring characteristics of the displacement cardiograph.
p0403 A73-42676
Transducer for converting arterial pulse wave into electric signals
[NASA-CASE-GSC-11531-1] p0612 N73-11097
Inflight heart and respiratory rate recording of pilots, using nose clip transducers
p0367 N73-27953
Muscle force transducer to detect tremors in divers under hyperbaric conditions
[AD-763343] p0438 N73-32010
TRANSFER FUNCTIONS
On the approximation of the optical modulation transfer function /MTF/ by analytical functions.
p0121 A73-20264
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity
p0244 A73-30279
Optical modulation transfer functions of human eye for white light
[IZF-1973-2] p0264 N73-23047
TRANSFER OF TRAINING
Need for within-trial feedback as a function of task similarity in adaptive training of manual control.
p0081 A73-16709

Computer-controlled differential review-time payoff as a training aid. p0083 A73-16725
Performance measurement system for combat crew flight training in complex aircraft weapon systems, identifying training research goals p0083 A73-16726
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
Response surface methodology analysis of training transfer in pursuit rotor tracking task, relating three independent variables through multiple-regression prediction equations p0430 A73-44774
Two components and two stages in search performance - A case study in visual search. p0435 A73-45339
Human performance in schematic concept formation as a function of socio-economic level, personality, intelligence, and race [AD-744781] p0260 N73-22052

TRANSFORMATIONS (MATHEMATICS)
New developments in EEG signal processing. p0058 A73-15279
Reference image /brightness distribution functions/ existence and normalization under additive and multiplicative groups of transformations in visual field p0432 A73-44908

TRANSFORMS
U TRANSFORMATIONS (MATHEMATICS)

TRANSFUSION
Hemotherapy of coagulation system disturbances of hepatolienal origin p0428 A73-44299

TRANSIENT LOADS
NT IMPACT LOADS

TRANSIENT RESPONSE
Analysis of transient visual sensations above the flicker fusion frequency. p0129 A73-21566
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models. p0324 A73-36656
Mathematical analysis of the operation of regulatory mechanisms of the spinal cord p0354 A73-39005
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2. p0359 A73-39777

TRANSISTOR AMPLIFIERS
Modification and updating of the bioelectric DS2C amplifier for a FET input. p0159 A73-22936
Two channel transistor amplifier design with negative capacitance correction for microelectrode applications p0430 A73-44723

TRANSISTOR CIRCUITS
Three channel transistorized pulse generator for electric stimuli used in electrophysiological studies p0084 A73-16739

TRANSISTORS
NT FIELD EFFECT TRANSISTORS

TRANSIT TIME
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times. p0057 A73-14767
Hypobaric hypoxia - Within-subject transition effects in albino rats. p0086 A73-17525
Neurological fatigue-indices of flight crews of long-range and military transport aviation p0193 A73-25040

TRANSITION METALS
NT COBALT 60
NT IRON
NT TITANIUM

TRANSLATIONAL MOTION
NT THREE DIMENSIONAL MOTION
Analysis of vestibular effects in experiments on swings p0305 A73-34235

TRANSMISSION
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT DATA TRANSMISSION
NT ELECTROMAGNETIC WAVE TRANSMISSION
NT HEAT TRANSFER
NT LIGHT SCATTERING
NT LIGHT TRANSMISSION
NT RADIATIVE HEAT TRANSFER
NT SIGNAL TRANSMISSION
NT TELEPHONY
NT TIME DIVISION MULTIPLEXING
NT WAVE PROPAGATION

TRANSMITTERS
NT RADIO TRANSMITTERS
Circuit technology of a temperature-measurement transmitter for biotelemetric applications p0239 A73-28575
Ultrasonic marine biotelemetry transmitter utilizing metal oxide semiconductor integrated circuits [AD-748605] p0074 N73-13119

TRANSPLANTATION
Immunological effectiveness of X ray irradiation on histocompatibility of mice skin transplants p0255 N73-22008

TRANSPORT AIRCRAFT
NT BOEING 720 AIRCRAFT
NT C-135 AIRCRAFT
NT CONCORDE AIRCRAFT
NT SHORT HAUL AIRCRAFT
Neurological fatigue-indices of flight crews of long-range and military transport aviation p0193 A73-25040
Aircrew workload during the approach and landing. p0351 A73-38005
Human stress expenditures in operational airlift mission flights p0189 N73-19151

TRANSPORT COEFFICIENTS
U TRANSPORT PROPERTIES

TRANSPORT PROPERTIES
NT ELECTRICAL RESISTIVITY
NT ELECTRON MOBILITY
NT GAS VISCOSITY
NT GASEOUS DIFFUSION
NT IONIC MOBILITY
NT VISCOSITY
Oxygen transport augmentation mechanism for human hemoglobin, considering hemoglobin translational mobility absence effects p0362 A73-39795

TRANSPORT THEORY
Monte Carlo radiation transport computer codes for calculating dose distributions and cell survival probabilities [NASA-CR-130965] p0176 N73-18127

TRANSPORTATION
NT AIR TRANSPORTATION

TRANSURANIUM ELEMENTS
NT PLUTONIUM 238

TRANSVERSE ACCELERATION
DNA catabolism in rat tissues in response to transverse accelerations p0087 A73-17679
Cardiovascular system reactions to alternating transverse accelerations in man p0087 A73-17687
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours p0123 A73-20978
Transverse acceleration effects on human cardiovascular system p0064 N73-12088
Transverse acceleration effects on human respiratory rate and oxygen metabolism p0181 N73-19084
Transverse acceleration effects on rat gastrointestinal response to drugs p0181 N73-19085
Transverse acceleration effects on rat hepatocytic structures p0181 N73-19086

TRANSVERSE OSCILLATION
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations. p0423 A73-43216

TREADMILLS
Exercise testing for detecting changes in cardiac rhythm and conduction.

p0043 A73-13542
Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803
Laddermil and ergometry - A comparative summary.
p0194 A73-25183
Performance evaluation of training devices for developing human physical fitness
[NASA-CR-134046] p0440 N73-32023
Treadmill running effect on human oxygen consumption
p0441 N73-33013

TREES (PLANTS)
NT DECIDUOUS TREES
Cytological changes in pine tissues treated with lunar materials collected on Apollo 12 quarantine mission
[NASA-CR-128914] p0265 N73-23054

TREMORS
Muscle force transducer to detect tremors in divers under hyperbaric conditions
[AD-763343] p0438 N73-32010

TRIAXIAL STRESSES
Measurement and effects of triaxial vibration on pilots in P-531 (Scout) helicopter under different flight conditions
[ISVR-TR-58] p0141 N73-16100

TRIAXIALITY
U TRIAXIAL STRESSES

TRIBOLIA
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808
Wing anomalies as result of weightlessness simulation for flour beetle Tribolium confusum
p0367 N73-27952

TRIGGERS
U ACTUATORS

TROPICAL STORMS
NT HURRICANES

TROPISM
NT GEOTROPISM

TROUBLESHOOTING
U MAINTENANCE

TRYPSIN
Informational biopolymer structure in early living forms.
p0090 A73-17946
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947

TRYPTAMINES
NT SEROTONIN
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657

TRYPTOPHAN
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218

TUBERCULOSIS
Thoracic X ray photography technique for tubercular lesion detection in flight personnel, comparing to standard radiography and radioscopy
p0586 A73-12155

TUNING
Frequency selectivity and two tone inhibition in neural coding of acoustic stimuli
[IZF-1972-25] p0264 N73-23050

TUNNEL RESISTORS
U RESISTORS

TURBIDITY
Training procedure for improving divers distance estimation ability in clear and turbid water
[AD-752976] p0187 N73-19140

TURBOFAN AIRCRAFT
NT A-7 AIRCRAFT
NT BOEING 720 AIRCRAFT
NT CONCORDE AIRCRAFT

TURBOJET AIRCRAFT
U JET AIRCRAFT

TURNING FLIGHT
Pilot performance during simulated standard instrument procedure turn with and without predictor display
[NASA-TM-X-62201] p0150 N73-17118

TWILIGHT
U TWILIGHT GLOW

TWILIGHT GLOW
Air-to-ground visibility of lights at low background levels
p0191 N73-19967

U

U.S.S.R.
Soviet bibliography on biocybernetics material received from Jan. to May 1972
[AD-750129] p0113 N73-15167
Research activities in exobiology and aerospace medicine
[JPRS-59015] p0262 N73-23024
USSR conference on exobiology and aerospace medicine
p0264 N73-23045
Bibliography of Russian literature on aviation and space medicine
[JPRS-53329] p0375 N73-29047
Studies in hypoxia and phylogenetics by USSR aerospace medical scientist
[NASA-TT-F-15101] p0417 N73-30991

UH-1 HELICOPTER
Performance tests to determine proficiency of maintenance personnel in servicing fuel start solenoid in UH-1 helicopter
[AD-745163] p0605 N73-10166

ULCERS
Digestive hemmorhages in aircrew - Individual and collective safety
p0332 A73-36952

ULNA
Three models of the vibrating ulna.
p0347 A73-37543

ULTRASONIC AGITATION
Skin sensitivity of palms, wrists and forearms to focused ultrasound, noting evoked touch, pulsation, cold, warmth and prick sensations and applications in receptor physiology
p0080 A73-16695

ULTRASONIC INSPECTION
U ULTRASONIC TESTS

ULTRASONIC RADIATION
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
Correlation of respiratory distress and ultrasonic transmission with severe decompression sickness in hamsters
[AD-743475] p0595 N73-10091

ULTRASONIC TESTS
Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446

Gas phase separation following decompression in asymptomatic rats - Visual and ultrasound monitoring.
p0050 A73-14162
Ultrasonic Doppler locators for peripheral vessel blood circulation and myocardium and valvular motor activity measurements
p0087 A73-17682
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534
ULTRASONIC WAVE TRANSDUCERS
Ultrasonic transducer instrument with broad beam dispersal for blood vessel displacement recording in chronic animal experimentation
p0408 A73-43109
Standard requirements for ultrasonic Doppler probes of cardiovascular systems in medical monitoring functions
p0063 N73-12083
Ultrasonic bone densitometer for measuring calcium content of bone structures
[NASA-CASE-MFS-20994-1] p0415 N73-30090
ULTRASONIC WAVES
U ULTRASONIC RADIATION
ULTRASONICS
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography.
p0583 A73-11509
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter.
p0159 A73-23173
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
Orbit and superior orbital fissure acoustic window for cranium posterior structures imaging by echoencephalographic techniques
p0402 A73-42667
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672
ULTRAVIOLET ABSORPTION
Megarad plastic film dosimeter.
p0427 A73-44212
ULTRAVIOLET LIGHT
U ULTRAVIOLET RADIATION
ULTRAVIOLET MICROSCOPY
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
ULTRAVIOLET RADIATION
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
An experimental basis for carcinogenic effects of ultraviolet radiation.
p0203 A73-26485
Plant growth response to low temperature and UV treatment, discussing chlorophyll synthesis, carbohydrate levels, ion balance and enzyme characteristics
p0203 A73-26486
Chorioretinal burn hazards of high intensity radiation sources in industry
p0145 N73-17071
Occupational hazards and adverse biological effects of ultraviolet radiation
p0148 N73-17094
Ultraviolet space irradiation effects on Aeromonas proteolytica extracellular enzyme production
p0292 N73-24111
Potassium ferrioxalate actinometric measurements of solar ultraviolet photobiological energy
p0292 N73-24113
ULTRAVIOLET SPECTROSCOPY
Twin spectrograph measurements at 2520-3375 A of metal trace elements in biological sample solutions
p0088 A73-17692
UNCERTAINTY
U PROBABILITY THEORY
UNCONSCIOUSNESS
NT BLACKOUT (PHYSIOLOGY)
NT NARCOSIS
Military aircraft pilot in-flight consciousness loss etiologies, discussing rapid decompression, hypoxia, dysbarism, seizure, improper maneuver, vasovagal syncope, acceleration sensitivity, etc
p0307 A73-34747
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112
UNDERGROUND NUCLEAR EXPLOSIONS
U NUCLEAR EXPLOSIONS
UNDERWATER ACOUSTICS
Receiver operating characteristics for underwater signal detection performance of sea lions
[AD-746520] p0073 N73-13113
UNDERWATER BREATHING APPARATUS
Calculation of minimum safe inspired gas temperature limits for deep diving
[AD-748197] p0103 N73-14104
Anthropometric measurements of military personnel engaged in underwater diving to development standards for design of equipment
[AD-748627] p0114 N73-15175
UNDERWATER ENGINEERING
Anthropometric measurements of military personnel engaged in underwater diving to development standards for design of equipment
[AD-748627] p0114 N73-15175
Design of electrohydraulic control system for underwater manipulator with position feedback
p0336 N73-26085
Experimental research in underwater medicine, flight stress, and pilot selection
[DLR-FB-73-15] p0367 N73-27951
Method for recovery of sunken bodies at depths of between 30 and 50 m
p0367 N73-27955
UNDERWATER OPTICS
Apparent object movement due to optical distortion produced by head movement under water
[AD-749319] p0101 N73-14086
Effects of resolution, signal to noise ratio, and contrast on underwater imaging systems performance
p0450 N73-33631
UNDERWATER SOUND
U UNDERWATER ACOUSTICS
UNDERWATER STRUCTURES
Habitability factors during long-term space and undersea missions in confined habitats
[NASA-CR-130537] p0151 N73-17123
UNDERWATER TESTS
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
Respiration mechanics during weightlessness simulation in an immersion medium
p0124 A73-20986
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Thermographic evaluation of relative heat loss areas of man during cold water immersion.
p0325 A73-36781
Tolerance to immersion in cold water
p0331 A73-36943
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
Influence of illumination color, viewing distance, and turbidity on underwater vision
[AD-743756] p0595 N73-10092
Tests to evaluate heat loss from Navy diver suits in water of 55, 45, and 35 F
[AD-747276] p0613 N73-11103

Physiological and mental performance effects of underwater work on humans
[AD-747701] p0072 N73-13107
Bibliography on effects of underwater environment on tools, equipment, and human performance
[AD-748000] p0074 N73-13122
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125
Improving distance under water and long-term effectiveness of training
[AD-752979] p0299 N73-25128
Handedness and adaptation to distortions of size and distance underwater
[AD-759722] p0337 N73-26098
Role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072

UNDERWATER VEHICLES
NT SUBMARINES

UNIPOLAR TRANSISTORS
U FIELD EFFECT TRANSISTORS

UNIVERSITIES
Influence of NASA stress lab program on physical education in US colleges
p0147 N73-17092

UNKNOWNS
U PROBLEM SOLVING

UNMANNED SPACECRAFT
NT BIOSATELLITE 2
NT LUNIK 16 LUNAR PROBE
NT SOLAR OBSERVATORIES
Terminal sterilization process for unmanned lander spacecraft
[NASA-CR-129513] p0065 N73-12100
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118
Sterilization for unmanned landers
[NASA-CR-133742] p0411 N73-30064
Planetary quarantine requirements for automated spacecraft flights
[NASA-CR-135795] p0445 N73-33040

UNSTEADY FLOW
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449
Analysis of pressure waves as a mean of diagnosing vascular obstructions.
p0346 A73-37524

UREAS
NT THIURONIUM
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660
Liquid retention in chlorpropamide therapy and water intoxication of patients
[NASA-TT-F-14597] p0609 N73-11077

URINALYSIS
Proteinuria and civil aviation aircrew
p0128 A73-21538
Proteinuria and military aircrew
p0128 A73-21539
Physiological time zone entrainment and stressor effects during prolonged C-141 transmeridian flights, using endocrine-metabolic indices in urine specimens
p0235 A73-28283
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Clinical practice and problems associated with urine analysis
p0147 N73-17089
Urinalysis methodology for detection of abusive and therapeutic drugs in man
p0228 N73-21117
Validity of rapid delta-aminolevulinic acid determination in urine for lead intoxication tests on industrial workers
[NASA-TT-F-14864] p0229 N73-21128
Chromatographic determination of aldosterone level in urine
[RAE-LIB-TRANS-1682] p0333 N73-26061
Chromatographic determination of urine corticosteroids
[RAE-LIB-TRANS-1694] p0333 N73-26062
Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Radioactivity urinalysis for calculating postflight astronaut cosmic radiation exposure
[NASA-CR-133378] p0365 N73-27939
Automatic device for assaying urine on bacterial adenosine triphosphate content
[NASA-CASE-GSC-11169-2] p0438 N73-32011

URINATION
Thermal flowmeter for urine volume measurement in manned space flight environment
[NASA-CR-128726] p0141 N73-16095

URINE
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
Fibrinolytic activity of urine in healthy persons
p0276 A73-31165
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Toxicity of gaseous urine and feces emissions on rat organism
p0182 N73-19097
Phenol preservative for reducing toxic urine outgassing into air environment
p0183 N73-19098
Preservatives for human urine storage and water reclamation in spacecraft cabin
p0183 N73-19099
Antimicrobial water reclamation methods for processing human urine
p0183 N73-19105
Antimicrobial phenyl preparations for human urine conservation during space flight
p0184 N73-19112
Free amino acid excretion in urine as test for early diagnosis of radiation damage in humans
p0215 N73-20092
High intensity noise effects on urinary K-Na ratios in rats
p0371 N73-29018
Hydroxyproline determination in collagen-like plasma and urine
[NASA-TT-F-15093] p0417 N73-30997
Elimination of creatinine in urine during prolonged hypokinesia
p0444 N73-33029

UTILITY AIRCRAFT
NT P-531 HELICOPTER
NT UH-1 HELICOPTER

UTILIZATION
NT WASTE UTILIZATION

V

V/STOL AIRCRAFT
NT HELICOPTERS
NT P-531 HELICOPTER
NT SHORT TAKEOFF AIRCRAFT
NT UH-1 HELICOPTER
NT VERTICAL TAKEOFF AIRCRAFT

VACUUM EFFECTS
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483

VACUUM TUBE OSCILLATORS
NT CATHODE RAY TUBES
NT GAS DISCHARGE TUBES
NT IMAGE TUBES

VACUUM TUBES
NT CATHODE RAY TUBES
NT GAS DISCHARGE TUBES
NT IMAGE TUBES

VALSALVA EXERCISE
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754

VALSALVA MANEUVER
U VALSALVA EXERCISE

VALVES
NT ARTIFICIAL HEART VALVES
NT CONTROL VALVES
NT GAS VALVES
NT HEART VALVES
NT PRESSURE REGULATORS
Performance tests to determine proficiency of maintenance personnel in servicing fuel start solenoid in UH-1 helicopter [AD-745163] p0605 N73-10166
Numerical solution of viscous fluid flow in finite tube with deformable walls in presence of valves for application to blood circulation process p0298 N73-25117

VAN DE GRAAFF ACCELERATORS
Radiation sterilization with Van de Graaff accelerators [NASA-TT-F-14821] p0219 N73-20120

VAPOR PHASES
Gas phase separation following decompression in asymptomatic rats - Visual and ultrasound monitoring. p0050 A73-14162

VAPORIZING
NT PROPELLANT EVAPORATION
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products. p0202 A73-26479

VARIANCE (STATISTICS)
NT ANALYSIS OF VARIANCE
NT MULTIVARIATE STATISTICAL ANALYSIS

VARIATIONS
NT ANNUAL VARIATIONS
NT DIURNAL VARIATIONS
NT PERIODIC VARIATIONS
Use of psychometric tests to account for subjective variations in operations performance relative to target acquisition p0191 N73-19974

VARIOMETERS
Electrical operational and pneumatic /variometer/ differentiation recording of displaced volume derivative from pneumotachograph in spontaneous breathing p0159 A73-22937

VASCULAR SYSTEM
NT AORTA
NT ARTERIES
NT BLOOD VESSELS
NT CAPILLARIES (ANATOMY)
NT GLOMERULUS
NT VEINS
Microvascular responses to alterations in oxygen tension. p0581 A73-11010
Book - Peripheral vascular diseases: Diagnosis and management. p0089 A73-17871
Cerebral temperature oscillations and vascular responses in man p0164 A73-23805
Analysis of pressure waves as a mean of diagnosing vascular obstructions. p0346 A73-37524
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture p0382 A73-40280
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h. p0402 A73-42668
Arterial hypertension symptoms in flying personnel p0253 N73-21991
Basic causal mechanisms responsible for loss of vascular tone during alterations in shifts to zero gravity [NASA-CR-128897] p0267 N73-23069
Use of therapeutic exercise for treatment of functional vascular disorders and occlusive lesions of arteries and veins [NASA-TT-F-15043] p0374 N73-29045
State of blood filling and bioelectric activity of grain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic vascular dysfunction p0443 N73-33027

VASOCONSTRICTION
Microvascular responses to alterations in oxygen tension. p0581 A73-11010
Studies of blood gas analysis at abnormal environment. p0582 A73-11210
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction. p0169 A73-24565
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity. p0277 A73-31344
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries p0429 A73-44720
Use of therapeutic exercise for treatment of functional vascular disorders and occlusive lesions of arteries and veins [NASA-TT-F-15043] p0374 N73-29045

VASOCONSTRICTOR DRUGS
NT SEROTONIN

VASODILATION
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique. p0084 A73-17098
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies p0193 A73-25041
Changes in microvascular diameter and oxygen tension induced by carbon dioxide. p0200 A73-26116
Xenon 133 measurement of cerebral volumetric circulation rates during papaverin and intensain vasodilation of canine and feline intercranial vessels, showing vessel resistance reduction p0239 A73-29074
A new method of measuring arterial dilation and its application. p0402 A73-42669
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation p0430 A73-44769

VASOMOTOR NERVOUS SYSTEM
U NERVOUS SYSTEM

VECTOR ANALYSIS
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction. p0286 A73-33115

VECTOR CONTROL
U DIRECTIONAL CONTROL

VECTOR SPACES
NT EIGENVECTORS

VECTORCARDIOGRAPHY
Automated system of storing and processing vectorcardiograms p0580 A73-10660
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome. p0587 A73-12445
Diagnostic value of vectorcardiogram in strictly posterior infarction. p0047 A73-13891
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB. p0058 A73-15200
Mathematical analysis of body surface potentials. p0059 A73-15646
Orthogonal versus planar vector-electrocardiography. p0118 A73-19930
A model to predict respiration from VCG measurements. p0123 A73-20578
Cardiac potential measuring and recording instrument with 240 probes, presenting circuit and block diagrams p0167 A73-24422

Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction.
p0286 A73-33115
Phase progression of the QRS complexes in electrocardiograms versus the inscribing directions of the QRS loops in vectorcardiograms.
p0286 A73-33116
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
Book on vectorcardiography covering equipment, techniques, lead systems and abnormalities associated with atrial and ventricular hypertrophy, bundle branch blocks, myocardial infarction and arrhythmia
p0306 A73-34452
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
Russian book - Integral topograms of heart potentials.
p0401 A73-42489
Changes in vectorcardiograms of atherosclerotic flying personnel after glucose testing
p0253 N73-21989

VECTORS (MATHEMATICS)
NT EIGENVECTORS

VEGETATION
Biometric and radiant transfer characteristics of forest vegetation
p0378 N73-29328
Radiation regime of forest vegetation under plant cover and open areas under various weather conditions
p0378 N73-29329
Use of soil-vegetation system brightness coefficients to measure vegetation quantity and crop yield
p0378 N73-29334

VEGETATION GROWTH
NT CROP GROWTH
Plant growth response to low temperature and UV treatment, discussing chlorophyll synthesis, carbohydrate levels, ion balance and enzyme characteristics
p0203 A73-26486
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
Measurements of radiation characteristics in multistoreyed overmature oak grove
p0378 N73-29332

VEINS
Telemetry of venous blood pressure at rest and at muscle activity during running.
p0053 A73-14290
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis.
p0094 A73-18336
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system
p0277 A73-31173

VELOCITY
NT AIRSPEED
NT ANGULAR VELOCITY
NT FLOW VELOCITY
NT GROUND SPEED
NT HIGH SPEED
NT PHASE VELOCITY
NT ROTOR SPEED
NT SUBSONIC SPEED

VELOCITY DISTRIBUTION
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449
Recent measurements of flow using nuclear magnetic resonance techniques.
p0171 A73-24855
Velocity distribution in aortic flow.
p0408 A73-43104
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108

VELOCITY ERRORS
Differential velocity effects on converging target intersection time estimation accuracy, considering plane conditions and air traffic controller experience
p0285 A73-32900

VELOCITY FIELDS
U VELOCITY DISTRIBUTION

VELOCITY MEASUREMENT
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity.
p0085 A73-17274
Vertical arm reaching movements for various gravitational levels, measuring reach time and angular and lower arm velocities
p0424 A73-43218

VELOCITY POTENTIALS
U FLOW DISTRIBUTION
U VELOCITY DISTRIBUTION

VELOCITY PROFILES
U VELOCITY DISTRIBUTION

VENTILATION
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612
Design of anesthetic flow valve canister system for exhaust gas absorption and laminar ventilation system for operating rooms
p0231 N73-21141

VERBAL COMMUNICATION
The employment of a spoken language computer applied to an air traffic control task.
p0083 A73-16728
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896

VERTEBRAE
Radiological assessment of the vertebral column from the point of view of aviation medicine
p0409 A73-43131

VERTEBRAL COLUMN
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914
Statistical analysis of occurrence of backache among Royal Air Force flight crews and ground crews to show effects of crew seats on physical comfort
[AD-745177]
p0597 N73-10102
Nonfatal ejection vertebral fracture comparison between US, British, and Swedish armed services
p0265 N73-23059

VERTEBRATES
NT AMPHIBIA
NT BATS
NT BIRDS
NT CALVES
NT CATS
NT CHIMPANZEES
NT DOGS
NT FISHES
NT FROGS
NT GUINEA PIGS
NT HAMSTERS
NT HOMEOTHERMS
NT HUMAN BEINGS
NT MAMMALS
NT MICE
NT MONKEYS
NT PRIMATES
NT RABBITS
NT RATS

NT SWINE
Comparative anatomy of the vestibular nuclear complex in submammalian vertebrates.
p0096 A73-18575
Electrophysiological investigation of suprasegmental motor control systems evolution through Cyclostomata-Primate series, noting preservation of reticulomotor neuron projection characteristics
p0118 A73-20001
Vertebrate photoreceptor cell /rods and cones/ development and structure, discussing light pathway, ciliary connective and microtubules, outer and inner segments, etc.
p0160 A73-23303
The morphological organization of the vertebrate retina.
p0160 A73-23304
Optical properties of vertebrate eyes.
p0161 A73-23312
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
VERTICAL PERCEPTION
Muscular activity control mechanism interactions in vertical posture maintenance from stabilogram, mechanogram and electromyogram data
p0585 A73-12119
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Effect of lateral body tilts and visual frames on perception of the apparent vertical.
p0392 A73-41736
Optimal input rates for tilt adaptation.
p0401 A73-42500
Vestibular function loss in man after unilateral section of eighth cranial nerve
[NASA-CR-129672] p0070 N73-13084
Effects of human alertness on vestibular nystagmus habituation
[AD-749352] p0103 N73-14108
Upper eye lid position effects in electro-oculographic vertical eye movement recordings
p0110 N73-15143
Asymmetry of fish otolithic receptor functions and vestibular disturbances during space flight
p0262 N73-23031
VERTICAL TAKEOFF AIRCRAFT
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft
p0282 A73-32044
VESTIBULAR TESTS
Semicircular canals as a primary etiological factor in motion sickness.
p0588 A73-12560
Auditory rail task for acoustic stimuli effects on human equilibrium under axisymmetric intermittent tone exposure, discussing acoustic energy effect on vestibular receptors
p0040 A73-13551
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation.
p0058 A73-15218
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650
The role of vestibulometry in medical evaluation of flight personnel
p0165 A73-23821
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339
Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus
p0199 A73-26087
Vestibular stresses effects on systemic and cerebral hemodynamics, considering human acceleration adaptation and compensation mechanisms
p0208 A73-27714
Changes in visual functions after the action of weak vestibular stimuli
p0209 A73-27719
Harmonic spectral analysis of nystagmus waveform frequency content for clinical vestibular examination via digital computer
p0237 A73-28502
Nystagmic response persistence to Fitzgerald-Hallpike caloric tests as function of directional cupular deflections due to head movement
p0238 A73-28510
Asymmetry of otolith responses in fish
p0279 A73-31507
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems
p0280 A73-31518
Experimental-mathematical analysis of the effects of rotational accelerations on the vestibular apparatus
p0303 A73-34120
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121
Analysis of vestibular effects in experiments on swings
p0305 A73-34235
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Skylab astronaut vestibular function experiment in orbital flight, discussing motion sickness susceptibility, stimulation thresholds and space perception measurements
p0307 A73-34741
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
Visual-vestibular interaction and motion perception.
p0318 A73-36460
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Aircraft pilot spatial disorientation and illusory perceptual break-off sensations during flight associated with minor vestibular asymmetry
p0356 A73-39111
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
Dynamic model of rotating spacecraft force effects on human vestibular system
p0599 N73-10119
Neurophysiology and dynamic response of vestibular system to angular and linear acceleration
[DR-215] p0606 N73-11057
Dynamic response of vestibular nuclei neurons of decerebrated cats subjected to sinusoidal rotation
[AMRU-R-70-2] p0606 N73-11059
Asymmetric response of cat semicircular canal neurons to symmetric sinusoidal rotation
[AMRU-R-69-2] p0607 N73-11060
Hypoxia effects on human vestibular tolerance during exposure to coriolis accelerations
p0065 N73-12092
Functional changes in systemic and cerebral hemodynamics with respect to vestibular stresses accompanying low accelerations

p0217 N73-20108
Changes in human visual functions after exposure to weak vestibular irritations
p0218 N73-20113
Mathematical simulation study of neuron response to vestibular analyzer exposed to periodically varying acceleration
[NASA-TT-F-15130] p0420 N73-31015
Survey of literature and morphological studies of vestibular nerve
[NASA-CR-135746] p0445 N73-33042

VESTIBULES
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
Comparative anatomy of the vestibular nuclear complex in submammalian vertebrates.
p0096 A73-18575
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438
Mathematical models for studying vestibular adaptation to stimuli in humans
[AMRU-R-70-1] p0607 N73-11062
Vestibulo-ocular response of man to oscillatory rotation during sleep
[AMRU-R-70-3] p0608 N73-11066
Response characteristics of vestibulo-ocular reflex arc
[AMRU-R-71-2] p0608 N73-11067
Effects of human alertness on vestibular nystagmus habituation
[AD-749352] p0103 N73-14108
End organs, central nervous system connections, and static and dynamic characteristics of vestibular system
p0105 N73-15103
Radiation effects on human visual and vestibular analyzer functions
[AD-750499] p0109 N73-15132
Bibliography on role of vestibular apparatus in compressed air work underwater
[AD-750686] p0109 N73-15133
Physiological factors of human vestibular adaptation to flight and space environments
p0110 N73-15146
Weightlessness effects on development of vestibular apparatus and ocular nystagmus in rat, using chronic 2g centrifuge
[NASA-CR-114569] p0149 N73-17112
Sound, light, and proprioceptive stimuli for inhibiting vestibular illusion in man
p0181 N73-19087
Vestibular analyzer functions in dogs after prolonged ionizing irradiation
p0181 N73-19088
Stress reactions of vestibular apparatus to ionizing radiation, coriolis forces, and gravitational stimuli
[AD-753511] p0220 N73-20132
Asymmetry of fish otolithic receptor functions and vestibular disturbances during space flight
p0262 N73-23031
Antiradiation drug effects on vestibular analyzer functions
p0263 N73-23033
Handbook on structural evolution of vestibular apparatus
p0264 N73-23044
Physical/mathematical analyses on human vestibular responses to acceleration stresses
p0373 N73-29033
Human hemodynamic responses and vestibular tolerances to body sway tests
p0373 N73-29034
Laboratory investigation of coriolis acceleration effects on vestibular apparatus of cosmonauts
[NASA-TT-F-15129] p0417 N73-30993

VFR (RULES)
U VISUAL FLIGHT RULES

VIABILITY
Survival of Arthrobacter crystallopoietes during prolonged periods of extreme desiccation.
p0119 A73-20026

VIBRATION
NT STRUCTURAL VIBRATION

VIBRATION DAMPERS
U VIBRATION ISOLATORS

VIBRATION EFFECTS
Polysynaptic pathways role in tonic vibration and monosynaptic reflexes due to muscle vibratory or nerve electric stimulation, respectively, discussing tetanization effects
p0578 A73-10409
Peripheral electromyography spike and ventral root unit discharge intervals during tonic vibration reflex of cat soleus motoneuron
p0578 A73-10410
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
German monograph - Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man.
p0047 A73-13818
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHF-11] p0061 A73-15878
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range
p0088 A73-17748
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
Human response to transportation noise and vibration.
p0310 A73-35328
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Three models of the vibrating ulna.
p0347 A73-37543
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
Radiological assessment of the vertebral column from the point of view of aviation medicine
p0409 A73-43131
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations
p0429 A73-44673
Decrements in tracking and visual performance during vibration.
p0431 A73-44777
Analysis of helicopter pilot and passenger reaction to vibration environment to determine effects of discrete frequencies and combinations of harmonic frequencies
p0591 N73-10019
Analysis of research activities conducted to determine criteria for passenger comfort in various methods of transportation

p0591 N73-10024
Simulator facility used to determine vibration effects on pilot tracking performance using rigid control stick
[AD-745193] p0605 N73-10164
Vibrational effects on visual acuity of human operator seated in military tracked vehicle
[AD-750345] p0114 N73-15172
Measurement and effects of triaxial vibration on pilots in P-531 (Scout) helicopter under different flight conditions
[ISVR-TR-58] p0141 N73-16100
Work-rest schedules for military tracking crews under prolonged vibration
p0271 N73-23986
Fluid dynamic aspects of cardiovascular behavior during low frequency whole-body vibration such as encountered by astronauts during launch and reentry
[NASA-CR-133843] p0412 N73-30069
Human response to vibration -- test facilities, equipment, experiments and publications
[ISVR-TR-60] p0415 N73-30093

VIBRATION ISOLATORS
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926
Effect on pilot performance and comfort of active vibration isolation system for commercial transport pilot seat
[NASA-CR-2146] p0066 N73-12109

VIBRATION MEASUREMENT
Reflex arch lability in rabbits at synchronous maximum frequency of electromyographic and muscle stretching vibration measurement
p0401 A73-42659
Vibration considerations in design of flexible manipulators
[NASA-CR-124189] p0221 N73-20138

VIBRATION MODE
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light.
p0581 A73-10973

VIBRATION PERCEPTION
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772
German monograph - Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man.
p0047 A73-13818
Interindividual differences in homomodal and heteromodal scaling of auditory and vibrotactile stimulation intensity and duration, using magnitude estimation method
p0204 A73-26750
Analysis of helicopter pilot and passenger reaction to vibration environment to determine effects of discrete frequencies and combinations of harmonic frequencies
p0591 N73-10019

VIBRATION PICKUPS
U TRANSDUCERS

VIBRATION PROTECTION
U VIBRATION ISOLATORS

VIBRATION SIMULATORS
Human response to vibration -- test facilities, equipment, experiments and publications
[ISVR-TR-60] p0415 N73-30093

VIBRATION TESTING MACHINES
U VIBRATION SIMULATORS

VIBRATION TESTS
German monograph - Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man.
p0047 A73-13818
Human tolerance to vibration
p0105 N73-15098
Clinical hematological indices for evaluating vibration effect (70 Hz, 0.4 cm amplitude) on radiation reaction in dogs
p0215 N73-20084
Tracking performance during whole-body vibration with side-mounted and center mounted control sticks
[AD-761798] p0370 N73-27971

VIBRATIONAL STRESS
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHF-11] p0061 A73-15878
Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Biophysical properties of vibration energy transfer to human body structure, noting harmful effects dependence on frequency range
p0088 A73-17748
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
Structural vibration and noise effects on man in aerospace operations
[AGARDOGRAPH-151] p0148 N73-17098

VIBROCARDIOGRAPHY
U PHONOCARDIOGRAPHY

VIDEO DATA
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214

VIDEO EQUIPMENT
Video instrumentation for radionuclide angiocardiography.
p0348 A73-37796
Use of a video system in the study of ventricular function in man.
p0348 A73-37797
Effect of automatic landing system display on pilot information requirements
p0600 N73-10126
Experiments in video camera positioning with regard to remote manipulators
[NASA-CR-124190] p0221 N73-20139

VIKING LANDER SPACECRAFT
Biological effects of Viking Lander spacecraft engine fuel on extraterrestrial life during landing on planet Mars
[NASA-TM-X-2714] p0107 N73-15118
Thermal inactivation of Bacillus subtilis var. niger spores on Viking lander
[NASA-CR-133223] p0333 N73-26058

VIKING MARS PROGRAM
Soil sampling and microorganism analysis in planetary spacecraft assembly area for prevention of Mars contamination
[NASA-CR-130009] p0135 N73-16059

VIKING ORBITER SPACECRAFT
Psychrophilic organisms in soil samples of areas for Viking spacecraft assembly
[REPT-2] p0333 N73-26063

VIRTUAL WORK
U EQUILIBRIUM

VIRUSES
Photosynthetic energy conversion in membranes, tissues, and reaction centers of bacteria and viruses
[COO-3162-9] p0070 N73-13091
Automated procedures for Passive Immune Agglutination system
[NASA-CR-128731] p0149 N73-17107
Hydrogen peroxide aerosols for decontamination of influenza atmosphere
[NASA-TT-F-15127] p0438 N73-32006

VISCERA
NT ADRENAL GLAND
NT ESOPHAGUS
NT GONADS
NT INTESTINES
NT KIDNEYS
NT LIVER
NT LUNGS
NT ORGANS
NT PANCREAS
NT PINEAL GLAND
NT PITUITARY GLAND
NT RECTUM
NT SPLEEN
NT STOMACH

NT TESTES
NT THYROID GLAND
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249

VISCOELASTIC FLOW
U VISCOELASTICITY

VISCOELASTICITY
Torsional elasticity of human skin in vivo.
p0391 A73-41625
A new method of measuring arterial dilation and its application.
p0402 A73-42669
Human arterial elasticity during breathing of reduced partial oxygen atmosphere
p0253 N73-21987

VISCOMETERS
Design of relative velocity blood viscometer
p0231 N73-21142

VISCOSITY
NT GAS VISCOSITY
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064
Effect of fibrinogen concentration on viscosity of human blood
[DLR-FB-73-54] p0446 N73-33046

VISCOUS FLOW
Numerical solution of viscous fluid flow in finite tube with deformable walls in presence of valves for application to blood circulation process
p0298 N73-25117

VISCOUS FLUIDS
Blood vessels simulation by muscle pump represented by elastically deformable pipe with valves, solving Navier-Stokes equation for viscous fluid flow
p0126 A73-21375

VISIBILITY
NT LOW VISIBILITY
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
Horizontal standard visibility determined by natural object contrast measurements, noting visual field observation
[DLR-FB-71-22] p0067 N73-12118
Characterization of interaction between detection and visibility processes with application to search policies
p0294 N73-24130
Effect of various parameters on long range underwater vision for narrow and broad beam illumination
p0450 N73-33630

VISIBLE RADIATION
U LIGHT (VISIBLE RADIATION)

VISIBLE SPECTRUM
U LIGHT (VISIBLE RADIATION)

VISION
NT BINOCULAR VISION
NT COLOR VISION
NT MONOCULAR VISION
NT NIGHT VISION
NT PERIPHERAL VISION
NT STEREOSCOPIC VISION
Psychological test for relative contributions of specific and nonspecific components to intersensory transfer between vision and touch
p0043 A73-13525
Rod vision chemistry in terms of rhodopsin, visual cycle and pigment-vision relations, considering dark and light adaptation
p0079 A73-16479
Electroretinography /ERG/, electro-oculography /EOG/, visual evoked response /VER/ and electric evoked response /EER/ procedures for electrophysiological investigation of visual system
p0080 A73-16484
Human visual system model based on neurological connectivity data from anatomical dissection, in vivo physiological measurements and psychological experimentation
p0309 A73-35239
Interaction of vision with optical aids.
p0390 A73-41608
Drug effects on vision of flying personnel
p0228 N73-21121

VISIOPLASTICITY
U FLOW VISUALIZATION

VISORS
Test evaluation of laser protective visors for flight crews
[AD-751470] p0142 N73-16102

VISUAL ACCOMMODATION
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Polarity cue for visual accomodation response of trained subjects to target motion direction change, considering retinal image blur and feedback relation
p0129 A73-21569
Absolute motion parallax and the specific distance tendency.
p0234 A73-28096
Scalar perceptions with binocular cues of distance.
p0235 A73-28176
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395
The problem of early presbyopia in aircrew.
p0329 A73-36923
Visual problems among senior flight personnel.
p0329 A73-36924
Problems related to high-performance flight in the Arctic regions
p0332 A73-36953
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
Effects of reduced atmospheric pressure, elimination of nitrogen, hypoxia, and exposure to restricted visual environment on range of accommodation and color vision
[NASA-CR-128896] p0258 N73-22037

VISUAL ACUITY
A minor perturbing effect of retinal locus on dot pattern recognition - Rejection of a possible artifact.
p0588 A73-12524
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Visibility, resolution and spatial acuities in terms of target-background contrast, diffraction, luminance, stimuli wavelength and anatomical variations effects on retinal images
p0079 A73-16477
Visual function as sum of visual acuity and visual field, considering role of resolution and detection tasks in retinal function examinations
p0079 A73-16478
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Ophthalmological assessment of visual functional impairment due to glare, stimulus motion and aging changes
p0080 A73-16485
The control of sensitivity in the retina.
p0097 A73-18673
Vernier alignment acuity task accuracy related to retinal image line position location, noting effect of high contrast grating background
p0120 A73-20159
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
Human retina-patterned ideal perceiving machine to calculate visual acuities for spatial arrangement in line figures

p0129 A73-21564
Eye dominance measurement relationship to image sharpness or visual acuity from binocular and monocular tests, obtaining dominance normal distribution
p0153 A73-21893
Visual acuity as a function of exposure duration.
p0165 A73-23838
Deficits in visual function associated with laser irradiation.
p0169 A73-24563
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Visual acuity dependence on background brightness, object contrast, pupil diameter and visual time lag
p0306 A73-34639
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies.
p0308 A73-34839
Localized electroretinography capable of maintaining constant light scattering with small angular dimensions by employing Ulbricht principle of uniformly illuminated sphere
p0308 A73-34963
The problem of early presbyopia in aircrew.
p0329 A73-36923
Visual problems among senior flight personnel.
p0329 A73-36924
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
Developments as regards maximum visual acuity with age among cockpit crew members.
p0387 A73-41164
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light
p0425 A73-43791
Decrements in tracking and visual performance during vibration.
p0431 A73-44777
Compensatory oculogravic response of eye movement direction during slow head rotation
p0111 N73-15148
Vibrational effects on visual acuity of human operator seated in military tracked vehicle
[AD-750345] p0114 N73-15172
Spectral deficits in visual acuity due to laser irradiation
[AD-750394] p0114 N73-15173
Peripheral acuity with complex stimuli at two viewing distances
p0191 N73-19965
Visual acuity changes in humans during hypokinetic bed rest test
p0255 N73-22014

VISUAL AIDS
Interaction of vision with optical aids.
p0390 A73-41608
Design of computerized airborne traffic display device with alphanumerical control for aircraft pilots
p0598 N73-10112
Improved pilot performance using simulated pictorial landing display with symbols
p0599 N73-10122
Visual display format effects on pilot describing functions in manual tracking performance
p0599 N73-10123

VISUAL CONTROL
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision
p0092 A73-18164
Pilot visual threshold and perception for aircraft movement estimation during unaided visual approach control
p0600 N73-10125

VISUAL CUES
U CUES
U VISUAL PERCEPTION

VISUAL DISCRIMINATION
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Color effects in visual discrimination, measuring response times in letter matching task
p0588 A73-12525
The effect of illumination level, stroke width and figure ground on legibility of NAMEL numbers.
p0083 A73-16729
Sensory, learned, and cognitive mechanisms of size perception.
p0091 A73-18031
Color naming and hue discrimination in congenital tritanopia and tritanomaly.
p0120 A73-20251
Stimulus effect on spatial summation of color receptive pathways and discrimination thresholds as function of color, gradient, retinal illumination and field size
p0120 A73-20254
Analysis of transient visual sensations above the flicker fusion frequency.
p0129 A73-21566
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
Single cell analysis of saturation discrimination in the macaque.
p0129 A73-21568
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity.
p0153 A73-21897
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
Binocular rivalry and binocular fusion of after-images.
p0200 A73-26200
Tachistoscopically measured independent image size and visual field recognition capacities of human eye
p0206 A73-27109
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays.
p0234 A73-28095
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
Detection of informational constraints related to multi-variate visual displays.
p0240 A73-29185
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia
p0275 A73-30999
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test
p0285 A73-33091
Information processing in the visual periphery.
p0304 A73-34150
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
The superiority of the pair-comparisons method for scaling visual illusions.

p0311 A73-35497
Successive differentiation of visual stimuli in monkeys under various conditions of presentation
p0363 A73-39805
Compensating for distortion in viewing pictures obliquely.
p0387 A73-41178
Sufficient conditions for the discrimination of motion.
p0388 A73-41181
Two visual systems in the frog.
p0389 A73-41302
Interaction of vision with optical aids.
p0390 A73-41608
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343
Noise blurred image recognition probability characteristics from experimental investigation, showing difference from statistical decision theory data
p0428 A73-44667
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166
Human recognition of contrasting target in noisy environment with diversion of attention
[FOA-2-C-2482-H5] p0611 N73-11092
Subjective tests of target acquisition time using television with image enhancement possibilities
[MBE-UFE-892-72-0] p0113 N73-15165
Proceedings of symposium on color vision, color perception, visual acuity, and psychophysiology
[AD-754328] p0221 N73-20136

VISUAL DISPLAYS
U DISPLAY DEVICES

VISUAL FIELDS
Extraretinal feedback and visual localization.
p0579 A73-10437
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Induced retinal image blurring effects on rabbit midbrain single cell trigger features and response efficiencies, noting receptive field responsive area
p0583 A73-11503
Scotopic vision - An unexpected threshold elevation produced by dark annuli.
p0585 A73-12080
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Test field surround effects on onset and offset reaction time to foveal stimulation
p0044 A73-13558
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
Psychophysical effects of night vision perceptual contrast in terms of central visual receptive field organization
p0046 A73-13759
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection
p0046 A73-13762
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
Visual field image analysis via investigation of receptor-furnished signal analysis by network of neuron-like structures
p0060 A73-15789
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Angular velocity magnitude conversion into visually perceived apparent velocity, using psychophysical mathematical model based on axisymmetric annular visual field perception
p0061 A73-15796
Visual function as sum of visual acuity and visual field, considering role of resolution and detection tasks in retinal function examinations
p0079 A73-16478
Reduced illumination effects on visual acuity, color vision, dark adaptation, accommodation, visual fields and glare
p0079 A73-16480
Observer target acquisition performance dependence on target position within restricted visual field
p0081 A73-16711
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165
Physiological mechanisms of evoked-potential habituation in the visual analysor
p0119 A73-20006
Attention field and perception probability distribution mechanisms of Muller-Lyer illusion due to angle contour
p0120 A73-20255
Random dot pattern luminance and contrast effects on limiting inter-stimulus interval for visual apparent motion masking by bright field
p0120 A73-20256
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894
Receptive fields of retinal ganglion cells.
p0161 A73-23315
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Tachistoscopically measured independent image size and visual field recognition capacities of human eye
p0206 A73-27109
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays.
p0234 A73-28095
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218
Information processing in the visual periphery.
p0304 A73-34150
Choice of optimal light characteristics for marks in optical sighting devices
p0306 A73-34241
The visual cortex as a spatial frequency analyser.
p0308 A73-34840
Extended border enhancement during intermittent illumination - Binocular effects.
p0308 A73-34842
Distance perception and the ambiguity of visual stimulation - A theoretical note.
p0311 A73-35492
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442

Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
Frontal eye-field lesions in monkeys.
p0317 A73-36446
Visual-vestibular interaction and motion perception.
p0318 A73-36460
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463
Interaction between contours in visual masking
p0345 A73-37395
Spatial characteristics of chromatic induction - The segregation of lateral effects from stray light artefacts.
p0346 A73-37419
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Comparison of tilt and displacement adaptation in visual perception, establishing qualitative differences by interocular transformation magnitude and exposure time methods
p0388 A73-41188
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
Effect of lateral body tilts and visual frames on perception of the apparent vertical.
p0392 A73-41736
Visual perception of relative object dimension during monocular and binocular rod equalization experiment in various visual field restriction conditions, recording eye movements and focusing characteristics
p0394 A73-41890
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons.
p0424 A73-43338
Mathematical model for physical space transformation into subjective field metric for monocular vision
p0432 A73-44906
Reference image /brightness distribution functions/ existence and normalization under additive and multiplicative groups of transformations in visual field
p0432 A73-44908
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] p0335 N73-26072

VISUAL FLIGHT
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior.
p0387 A73-41158

VISUAL FLIGHT RULES
Analysis of aircraft pilot capability to visually detect other aircraft in air to air situation as collision avoidance feasibility
[FAA-RD-73-40] p0231 N73-21145
Performance tests to determine capability of aircraft pilots to avoid midair collisions based on visual perception of target and information from pilot warning indicator
p0231 N73-21146

VISUAL OBSERVATION
Mathematical models for distance perception of earth surface features observed from ascending vehicle, considering convergence, accommodation and monocular parallax mechanisms
p0060 A73-15785
Differential velocity effects on converging target intersection time estimation accuracy, considering plane conditions and air traffic controller experience
p0285 A73-32900
Choice of optimal light characteristics for marks in optical sighting devices
p0306 A73-34241
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Eye movements of trained inspectors recorded during visual inspection of colored slides of IC chips, determining performance with emphasis on speed
p0423 A73-43212
Horizontal standard visibility determined by natural object contrast measurements, noting visual field observation
[DLR-FB-71-22] p0067 N73-12118
Analysis of aircraft pilot capability to visually detect other aircraft in air to air situation as collision avoidance feasibility
[FAA-RD-73-40] p0231 N73-21145

VISUAL PERCEPTION
NT AUTOKINESIS
NT CRITICAL FLICKER FUSION
NT SPACE PERCEPTION
NT VISUAL DISCRIMINATION
Axiomatic formulation of a mathematical model for visual adaptation
p0579 A73-10655
Two stage mathematical model of brightness perception operation for stimuli having luminance field with asymmetric discontinuity
p0585 A73-12078
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Study of variations of retinal disparities around the fixation point by the binocular vernier method in the foveal region
p0046 A73-13763
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Information theory mathematical models applied to different visual function activity phases, covering Shannon and Fisher probability models, Shreider semantic theory and Kolmogorov algorithm
p0060 A73-15784
Mathematical description of some visual inertia effects
p0060 A73-15786
Axiomatic mathematical model for human visual edge contrast based on additivity, one-dimensionality and contrast continuity parameters
p0060 A73-15788
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
Mathematical and physical models of human long and short term memory, considering information processing and memorization at lower visual perception levels
p0061 A73-15793
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795

Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Papers on visual function assessment covering visual acuity, fields and adaptation, night, color and rod vision, depth perception and electrophysiological measurements
p0079 A73-16476
Color vision in terms of spectral sensitivity, color appearance and discrimination, chromatic stimuli production, pigments spectral response, etc
p0079 A73-16481
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
Mislocation of visual stimuli during voluntary saccades.
p0084 A73-17174
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625
Inter-hemispheric transfer of meaningful visual information in normal human subjects.
p0119 A73-20123
Human receptive visual field adaptation characteristics for stabilized retinal images by psychophysical probe detection technique
p0120 A73-20252
Attention field and perception probability distribution mechanisms of Muller-Lyer illusion due to angle contour
p0120 A73-20255
Intrinsic light brightness and intensity estimation tests for foveal and peripheral retina under photopic and scotopic stimuli
p0120 A73-20257
Neural channel mechanism for real light and equivalent background coding, using test flashes under bleaching and field adaptation
p0121 A73-20258
Electrical stimulation effects of human eye on photic threshold for square wave vision as function of wavelength, orientation and spatial frequency
p0121 A73-20260
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
Information processing in the visual system.
p0122 A73-20374
Contrast and assimilation effects analysis based on receptive field models of vertebrate retinal function
p0123 A73-20812
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
Retinal S-potential receptive field relationship to light energy and wavelength, considering cone and rod potentials, ganglion cells and vision
p0161 A73-23314
Retinal mechanisms of colour vision.
p0161 A73-23316
Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms
p0162 A73-23317
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
Retention of information in the iconic visual memory during recognition of images of varying complexity
p0199 A73-26084
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
Possible stimulus hypothesis and visual space perception.
p0202 A73-26321
Human visual evoked response signal decomposition by complex demodulation in terms of after-discharge time, envelope and frequency parameters
p0203 A73-26497
The effects of edge sharpness and exposure duration on detection threshold.
p0204 A73-26718
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
Changes in visual functions after the action of weak vestibular stimuli
p0209 A73-27719
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Flashblindness recovery following exposure to constant energy adaptive flashes.
p0238 A73-28505
Anatomical and neurophysiological investigations of centrifugal control of retinal activity via efferent optic nerve fibers
p0242 A73-29875
Foveal threshold additivity measurements for monochromatic and mixed light, using grating resolution as brightness criterion
p0246 A73-30398
A visual stimulator employing a T.V. raster display.
p0246 A73-30400
Normal fixation of eccentric targets.
p0275 A73-31018
Threshold and suprathreshold perceptual color differences.
p0275 A73-31019
Spatial information coding in the human visual system - Psychophysical data.
p0309 A73-35240
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241
Book - The psychology of visual perception.
p0310 A73-35474
Neuronal elements of the orienting response - Microrecordings and stimulation experiments in rabbits.
p0316 A73-36444
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450
Eye movements necessary for continuous perception during stabilization of retinal images.
p0318 A73-36461
Evaluation of human operator visual performance capability for teleoperator missions.
p0344 A73-37327
Linear summation of spatial harmonics in human vision.
p0345 A73-37411
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004

Inverted posture illusion phenomenon in astronauts during weightless space flight, discussing vestibular organ function, acceleration effects and body gravitation sensing system
p0356 A73-39149
Visual responsiveness repeat variability magnitude during prolonged sessions and time of day
p0357 A73-39479
Human miniature eye movement relationship to visibility and saccades position-correcting reflex function and suppression
p0383 A73-40411
A study of the statistical patterns of visual perception of a black and white raster image
p0385 A73-40861
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
Illuminance and albedo variations /whiteness constancy/ category judgments for stimuli with unpatterned and patterned surfaces
p0388 A73-41183
Spatial frequency selectivity of a visual tilt illusion.
p0392 A73-41642
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
Soviet book on visual image formation on retina covering perception, stabilization, manipulative ability, etc
p0406 A73-42869
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342
Bee image detection by ommatidium based on physical model using electromagnetic analysis of light absorption in photoreceptor
p0424 A73-43344
Visual perception dominance over touch related to threshold changes, analyzing nervous system reliance on sense with lower threshold
p0425 A73-43847
Asymmetry in perception - Attention versus other determinants.
p0435 A73-45338
Visual evoked cortical response as measure of stress in naval environment, using rapid flash rates
[AD-744934] p0595 N73-10088
Influence of illumination color, viewing distance, and turbidity on underwater vision
[AD-743756] p0595 N73-10092
Effect of vigilance on performance of simple visual detection task
[AD-745317] p0596 N73-10097
Effect of automatic landing system display on pilot information requirements
p0600 N73-10126
Bayesian model for stimuli processing in visual space perception
p0600 N73-10127
Visual image generation as textured flight information resembling retinal images for airborne flight simulation
p0600 N73-10128
Literature review on psychophysiological factors affecting visual perception of colored signal light
[AD-746297] p0610 N73-11083
Analysis of reaction time to different visual cuing methods in large displays during secondary task performance
[AD-747688] p0068 N73-12120
Psychophysical functions of range and time estimates by ground and aerial observers
[AD-747271] p0071 N73-13094
Noise and response complexity effects on human attention and performance in visual perception task
[AD-747797] p0072 N73-13105
Receiver operating characteristics for underwater signal detection performance of sea lions
[AD-746520] p0073 N73-13113
Substantive analyses of optical design, using visual perception
[AD-749372] p0100 N73-14084
Apparent object movement due to optical distortion produced by head movement under water
[AD-749319] p0101 N73-14086
Systems engineering methods for human performance enhancement in signal detection and flight control
[AD-748239] p0102 N73-14098
Bloch law error in visual perception of capacitor discharge brightness
[AD-749452] p0104 N73-14109
Visual perception during space flight
p0105 N73-15104
Prolonged bed rest and positive radial acceleration effects on human visual response time
[NASA-TM-D-7161] p0107 N73-15117
Visual evoked responses from divers subjected to hyperbaric conditions simulating depths to 1200 feet breathing various gas mixtures
[AD-749325] p0108 N73-15127
Radiation effects on human visual and vestibular analyzer functions
[AD-750499] p0109 N73-15132
Fatigue effect on human visual perception
[AD-750097] p0113 N73-15171
Training procedure for improving divers distance estimation ability in clear and turbid water
[AD-752976] p0187 N73-19140
Modelling of random human visual search performance based on physical properties of eye
p0190 N73-19961
Changes in human visual functions after exposure to weak vestibular irritations
p0218 N73-20113
Conference on human visual search and perception
[AD-754327] p0221 N73-20133
Proceedings of symposium on color vision, color perception, visual acuity, and psychophysiology
[AD-754328] p0221 N73-20136
Computerized simulation of three dimensional robots using generalized cylinder descriptions
[AD-755139] p0223 N73-20152
Analysis of aircraft pilot capability to visually detect other aircraft in air to air situation as collision avoidance feasibility
[FAA-RD-73-40] p0231 N73-21145
Performance tests to determine capability of aircraft pilots to avoid midair collisions based on visual perception of target and information from pilot warning indicator
p0231 N73-21146
Photographic recording of aircraft in near midair collision conditions to determine feasibility of collision avoidance based on visual perception of pilot
[CDC-JL-5] p0231 N73-21147
Analysis of flight tests to determine range of visual detection of aircraft as basis for visual perception to avoid midair collisions
p0231 N73-21148
Acceleration effects on human visual functions under hypoxic conditions
p0263 N73-23040
Optical modulation transfer functions of human eye for white light
[IZF-1973-2] p0264 N73-23047
Limitations on pilot visual perception of target from low flying aircraft
[AD-759651] p0300 N73-25136
Psychophysiological aspects in flight personnel visual perception of image indicator
p0373 N73-29035
Visibility and optimum light characteristics of marks for sighting devices
p0374 N73-29039
Improved performance of visual perception of solar patrol observers monitoring sun activity
[AD-760802] p0377 N73-29063
Algorithms involved in visual shape perception
p0446 N73-33050

VISUAL PIGMENTS
Modified rhodopsin in the pigment epithelium.
p0121 A73-20263
The structure and reactions of visual pigments.
p0160 A73-23306
Duplex vision theory of photoreceptor /rods and cones/ light and dark adaptation, discussing rhodopsin regeneration, bleaching and desensitization mechanisms
p0162 A73-23317
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919

Human cone optical density estimation implications of conflicting results for luminosity at bleaching intensities in dichromats related to use of psychophysical data
p0246 A73-30402
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Frog red rod dark adaptation from recorded receptor potentials of isolated retina, examining permanent sensitivity loss due to pigment bleaching
p0407 A73-42963
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
Literature review on human macular pigment absorption and density spectrum of cone receptor [IZF-1972-17]
p0264 N73-23046

VISUAL SIGNALS
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
Group performance in a visual signal-detection task.
p0194 A73-25182
Manipulating the response criterion in visual monitoring.
p0247 A73-30499
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893
Adaptive measurement of vigilance decrement.
p0423 A73-43211
Effect of vigilance on performance of simple visual detection task [AD-745317]
p0596 N73-10097

VISUAL STIMULI
Some differences among figural aftereffects, apparent motion, and paracontrast.
p0578 A73-10435
Extraretinal feedback and visual localization.
p0579 A73-10437
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
Photopic luminous efficiency measured by critical flicker frequency method, noting dependence on intermittence frequency of light stimulus or overall radiance level [AD-754344]
p0585 A73-12076
Two stage mathematical model of brightness perception operation for stimuli having luminance field with asymmetric discontinuity
p0585 A73-12078
Influence of border and background on perception of straightness.
p0585 A73-12081
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Verbal estimates of perceived time of flashing lights interval, relating to lights separation distance
p0044 A73-13552
Tests for binocular rivalry of light contours for detection of randomness in disappearance patterns
p0044 A73-13557
Test field surround effects on onset and offset reaction time to foveal stimulation
p0044 A73-13558
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
Stereoscopic depth magnitude in viewing background-contrasted superimposed half-fields, noting relation to binocular disparity detection
p0046 A73-13762
Cortical area of neural loci involved in monoptic and dichoptic metacontrast occurring for target and masking stimuli imaged on different retinal regions
p0046 A73-13764
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219
Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
Visibility, resolution and spatial acuities in terms of target-background contrast, diffraction, luminance, stimuli wavelength and anatomical variations effects on retinal images
p0079 A73-16477
Color vision in terms of spectral sensitivity, color appearance and discrimination, chromatic stimuli production, pigments spectral response, etc
p0079 A73-16481
Mislocation of visual stimuli during voluntary saccades.
p0084 A73-17174
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent.
p0085 A73-17199
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis
p0092 A73-18163
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
Central tracking task performance simultaneously with response to peripheral stimulus under high heat stress environments
p0096 A73-18473
Tilt discrimination and motion aftereffect independence of flicker rate of stroboscopically illuminated contours visual stimuli
p0096 A73-18624
Dynamic properties of vision. III - Twin flashes, single flashes and flickerfusion.
p0120 A73-20253
Stimulus effect on spatial summation of color receptive pathways and discrimination thresholds as function of color, gradient, retinal illumination and field size
p0120 A73-20254
Random dot pattern luminance and contrast effects on limiting inter-stimulus interval for visual apparent motion masking by bright field
p0120 A73-20256
Threshold variance analysis of monocular vs binocular visual stimulation in apparent movement perception
p0121 A73-20262
Cyclofusional stimulation effects on retinal image disparity in terms of central component and Panum fusional areas
p0121 A73-20265

Saccadic suppression for structured background as function of visual image pattern and threshold detection elevation in central nervous system
p0121 A73-20267
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225
Psychophysical areal summation and stimulus contour and threshold visibility effects on size selective adaptation in human vision for single- and multichannel models
p0128 A73-21563
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity.
p0153 A73-21897
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
Limulus photoreceptor response to single photon stimulation, discussing flash intensity, dim lights, discrete waves and subliminal responses
p0160 A73-23308
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681
Corpus callosum role in monocular system transcommisural interactions from binocular interaction studies of stimulus-evoked potentials in rat visual cortex
p0167 A73-24332
Electroretinogram recovery cycle during light adaptation and after dark adaptation
p0168 A73-24518
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
The influence of wavelength on visual adaptation to spatially periodic stimuli.
p0200 A73-26199
Adjustment of saccade characteristics during head movements.
p0201 A73-26222
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
Possible stimulus hypothesis and visual space perception.
p0202 A73-26321
The dependence of the negative afterimage on the duration of the stimulus and the stimulus intensity
p0204 A73-26550
Foveal contrast sensitivity edge effect dependence on test stimulus size, form and duration
p0204 A73-26716
The effects of edge sharpness and exposure duration on detection threshold.
p0204 A73-26718
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
Estimation of the variability of the latency of responses to brief flashes.
p0204 A73-26720
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717

Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Evoked potentials to changes in the chromatic contrast and luminance contrast of checkerboard stimulus patterns.
p0236 A73-28355
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357
Scotopic electroretinography and visual evoked responses under adaptive illumination, comparing blind spot stray light with parafoveal stimulation
p0237 A73-28361
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
Stimulus luminance-duration relationship of adapting light effect in human electroretinography, referring to Bunsen-Roscoe and Bloch constant law
p0237 A73-28363
The macular and paramacular local electroretinograms of the human retina and their clinical application.
p0237 A73-28364
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123
Properties of human visual orientation detectors - A new approach using patterned afterimages.
p0239 A73-29124
Influence of the dazzling of an eye on the state of adaptation of the congeneric eye in a normal subject
p0245 A73-30388
Saccadic eye movement control system, investigating response characteristics to variously timed pulse stimuli
p0245 A73-30389
The Mach-Dvorak phenomenon and binocular fusion of moving stimuli.
p0245 A73-30392
Oscillatory waves in intraretinally recorded electroretinograms in primates, considering electrode depth, stimulus duration and intensity and background illumination, anesthesia and tetrodotoxin effects
p0245 A73-30393
Voluntary small saccadic eye movements in presence of stationary visible target, considering scanning function of fixation saccades
p0246 A73-30394
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395
A visual stimulator employing a T.V. raster display.
p0246 A73-30400
Servo-controlled moving stimulus generator for single unit studies in vision.
p0246 A73-30401
Subjective brightness contrast lack of correlation with steady state evoked potential amplitude in suprathreshold stimuli range
p0275 A73-31017
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600

Space-time adaptation of visual position constancy.
p0304 A73-34223
The visual cortex as a spatial frequency analyser.
p0308 A73-34840
Stereoscopic depth aftereffects with random-dot patterns.
p0308 A73-34841
Temporal factors of movements in visual aftereffects
p0308 A73-34843
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
Movement perception during voluntary saccadic eye movements.
p0308 A73-34845
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
Amplitude of visual suppression during the control of binocular rivalry.
p0311 A73-35491
Distance perception and the ambiquity of visual stimulation - A theoretical note.
p0311 A73-35492
Factors affecting processing mode in visual search.
p0311 A73-35493
Influence of stimulus symmetry on visual scanning patterns.
p0311 A73-35494
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
Stereoscopic vision - Cortical limitations and a disparity scaling effect.
p0312 A73-35922
Supranuclear connections to oculomotor nuclei in terms of stimulus relation to eye movements
p0316 A73-36435
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
The control of eye movements in the saccadic system.
p0317 A73-36453
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
Optokinetic stimulation of an immobilized eye in the monkey.
p0318 A73-36457
Ambivalent optokinetic stimulation and motion detection.
p0318 A73-36458
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459
Eye movements necessary for continuous perception during stabilization of retinal images.
p0318 A73-36461
Scanning movements in space perception in terms of convergence role during cue conflict and cue isolation experiments
p0318 A73-36462
Involuntary eye movements in the presence and absence of points
p0322 A73-36568
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911
Interaction between contours in visual masking
p0345 A73-37395
Linear summation of spatial harmonics in human vision.
p03 A73-37411
Monkey rod receptor potential suppressic at photopic stimulus intensities by neurophysiological inhibitory mechanism for clearing cone initiated visual pathway
p0345 A73-37412
Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation.
p0346 A73-37413
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task.
p0353 A73-38378
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Role of associations in the formation of evoked potentials from the human cerebral cortex
p0362 A73-39798
Successive differentiation of visual stimuli in monkeys under various conditions of presentation
p0363 A73-39805
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
Compensating for distortion in viewing pictures obliquely.
p0387 A73-41178
A comparison of the Ponzo illusion with a textural analoque.
p0388 A73-41180
Reaction times for focal and nonfocal /peripheral/ processing of simultaneously presented color and form stimuli
p0388 A73-41182
Illuminance and albedo variations /whiteness constancy/ category judgments for stimuli with unpatterned and patterned surfaces
p0388 A73-41183
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184
Visual search, complex backgrounds, mental counters, and eye movements.
p0388 A73-41185
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
Individual physiological differences in evoked potential reactions to light sources, discussing latent periods, potential amplitude distribution and EEG measurement techniques
p0393 A73-41888
Optimal input rates for tilt adaptation.
p0401 A73-42500
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958

Stimulus specificity in the human visual system.
p0407 A73-42960
Rectifier-like color dependent phase shifts in electrophysiological responses to different colored stimuli at evoked potential and single neuron levels
p0407 A73-42961
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation
p0428 A73-44550
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio
p0434 A73-45159
Visual evoked potentials to changes in the motion of a patterned field.
p0435 A73-45167
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168
Reaction tester for testing reaction to light stimuli
[NASA-CASE-MSC-13604-1] p0073 N73-13114
Predictive control of human eye tracking movements in response to visual stimuli
p0111 N73-15149
Peripheral acuity with complex stimuli at two viewing distances
p0191 N73-19965
Design of light modulator for generation of periodic visual stimuli
[AD-754562] p0223 N73-20149
Comparison of electroencephalographic response patterns in man and monkeys to visually evoked cortical stimuli
[IZF-1972-24] p0264 N73-23049
Human continuous reaction time task distribution rates for paced and selfpaced responses to visual stimuli
[IZF-1973-5] p0268 N73-23077
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anesthetized rabbits
p0449 N73-33069
Orientative-investigative reaction as factor changing configuration of evoked potentials during repeated light flashes
p0449 N73-33070

VISUAL TASKS
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
Color effects in visual discrimination, measuring response times in letter matching task
p0588 A73-12525
Vernier acuity as affected by target length and separation.
p0041 A73-13063
Effects of intermittent and continuous noise on serial search performance.
p0044 A73-13560
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760
Identification and adjustment of psychological factors to improve solar patrol observing.
p0057 A73-14841
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
Visual function as sum of visual acuity and visual field, considering role of resolution and detection tasks in retinal function examinations
p0079 A73-16478
Visual work duration and intensity effects on optic papillae expansions and shape alterations, noting differences between trained and untrained subjects
p0080 A73-16694
A human factors approach to lighting recommendations and standards.
p0083 A73-16730
Effects of noise and response complexity upon vigilance performance.
p0086 A73-17523
Visual-motor coordination characteristics of parachute jumpers
p0088 A73-17750
Probability estimate for visual target detection in terms of luminance threshold and target size and duration
p0093 A73-18242
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Human performance measures relationship determination across sense modes under visual, auditory and combined stimulus conditions by controlling for task difficulty on individual basis
p0093 A73-18244
Functional state alteration of the visual analysor in pilots
p0093 A73-18257
The superior colliculus of the brain.
p0094 A73-18347
Physical work induced hyperthermia effects on detection rate in visual vigilance task performance in hot and humid environment
p0095 A73-18469
Autokinetic movement as a function of the implied movement of target shape.
p0117 A73-19549
Vernier alignment acuity task accuracy related to retinal image line position location, noting effect of high contrast grating background
p0120 A73-20159
Polarity cue for visual accomodation response of trained subjects to target motion direction change, considering retinal image blur and feedback relation
p0129 A73-21569
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Fatigue levels of cerebral hemispheres in response to visual task and test stimuli, noting left hander reduced performance capacity
p0157 A73-22925
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Group performance in a visual signal-detection task.
p0194 A73-25182
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Ergonomic endurance limits, physiological strains and fatigue assessment in video coding information task performance as function of work shift time length
p0198 A73-25649
Target-detection performance as a function of noise intensity and task difficulty.
p0201 A73-26320
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097
Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123
Optimal lighting for visual tasks, discussing color, type, transillumination, crossed polarization, brightness patterns, diffuse reflection and surface shadowgraphing

p0247 A73-30498
Manipulating the response criterion in visual monitoring.
p0247 A73-30499
Normal fixation of eccentric targets.
p0275 A73-31018
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task.
p0283 A73-32395
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
Factors affecting processing mode in visual search.
p0311 A73-35493
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495
Searching for many targets - An analysis of speed and accuracy.
p0311 A73-35498
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
Gaze-positioning eye movement perturbations during somnolence states
p0332 A73-36950
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Interference of 'attend to and learn' tasks with tracking.
p0353 A73-38377
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task.
p0353 A73-38378
The psychophysical inquiry into binocular summation.
p0388 A73-41187
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
Dynamic operative image formation and function features during extrapolation tracking of visibly moving target, noting image reaction to operator performance
p0393 A73-41886
Visual perception of relative object dimension during monocular and binocular rod equalization experiment in various visual field restriction conditions, recording eye movements and focusing characteristics
p0394 A73-41890
Cognitions and 'placebos' in behavioral research on ambient noise.
p0406 A73-42950
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959
Signal and noise in the human oculomotor system.
p0407 A73-42964
Adaptive measurement of vigilance decrement.
p0423 A73-43211
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
Two components and two stages in search performance - A case study in visual search.
p0435 A73-45339
Study of differences between left and right hand performance in compensatory tracking task
[RAE-TR-72117] p0141 N73-16098
Concept evaluation and subsystem analyses for design of remote controlled teleoperator visual system
[NASA-CR-124059] p0150 N73-17117
Air-to-ground visibility of lights at low background levels
p0191 N73-19967
Effect of sleep deprivation and heat stress on human performance in visual and auditory tasks
[OES-8/72] p0421 N73-31024

VISUAL TRACKING
U OPTICAL TRACKING
VISUALIZATION OF FLOW
U FLOW VISUALIZATION
VITAMIN B
U THIAMINE
VITAMIN B COMPLEX
U BIOTIN
VITAMIN B 06
U PYRIDOXINE
VITAMIN C
U ASCORBIC ACID
VITAMINS
NT ASCORBIC ACID
NT BIOTIN
NT PYRIDOXINE
NT THIAMINE
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036
Multiple immunoassay system for determining parathyroid hormone, calcitonin, and vitamin D in human blood
p0174 N73-18112
Medical analysis of vitamin balance among personnel of Tenth Soviet Antarctic Expedition to show effects on health and acclimatization ability
p0379 N73-29357

VOICE
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329
Voice and hearing in system of acoustic orientation of animals
[NLL-DRIC-TRANS-3056-(3623.66)] p0291 N73-24101
VOICE COMMUNICATION
NT TELEPHONY
Measurement of operator workload in formation processing
[NASA-CR-2150] p0070 N73-13087
Voice communication and hearing in acoustic orientation systems of animals at various evolution levels
[DRIC-TRANS-3056] p0298 N73-25121
VOLATILITY
Volatile terpenoids from aeciospores of Cronartium fusiforme.
p0206 A73-27145
VOLATILIZATION
U VAPORIZING
VOLUMETRIC ANALYSIS
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929
The effect of immobilization on body fluid volume in the rat.
p0358 A73-39487
Thermal flowmeter for urine volume measurement in manned space flight environment
[NASA-CR-128726] p0141 N73-16095
VTO FIGHTER AIRCRAFT
U VERTICAL TAKEOFF AIRCRAFT
VTOL AIRCRAFT
U VERTICAL TAKEOFF AIRCRAFT

W

WAKEFULNESS
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263

Patterns of reflex excitability during the ontogenesis of sleep and wakefulness. p0052 A73-14264
Wakefulness and sleep states in developing organism, discussing REM sleep deprivation effects on behavior, brain excitability, pharmacology and biochemistry p0052 A73-14265
Diurnal psychic working capacity dynamics under conditions of continuous 72-hr wakefulness p0124 A73-20989
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics. p0126 A73-21464
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight p0170 A73-24697
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system. p0201 A73-26223
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep. p0388 A73-41179
Activity cycle data for spacecrews of Soyuz 3 to 9 spacecrafts before, during and after space flights [JPRS-58173] p0137 N73-16068
Electrophysiological sleep patterns of human and animal brains [NASA-TT-F-740] p0257 N73-22023
Neurophysiology of sleep and wakefulness in fish, amphibians, birds, and reptiles p0257 N73-22025
Thalamic cat cell activities during sleep and wakefulness phases p0257 N73-22030
Rhythm disturbances in sleep and wakefulness cycles of Soyuz 3 and 9 crews before, during, and after space flight [NASA-TT-F-15103] p0375 N73-29048

WALKING
Features of supraspinal control of the reflex paths of the spinal cord during walking p0163 A73-23677
Relationship of physiological strain to change in heart rate during work in the heat. p0283 A73-32548

WALKING MACHINES
Physical model selection for the balance preservation system in man p0431 A73-44903

WALL TEMPERATURE DISTRIBUTION
U TEMPERATURE DISTRIBUTION

WARFARE
NT COMBAT
Concepts for reduction of fatigue in sustained tactical operations [AD-746643] p0611 N73-11090
Evaluation of device to train forward air controllers to communicate target locations [AD-751292] p0142 N73-16103

WARMING
U HEATING

WARNING DEVICES
U WARNING SYSTEMS

WARNING SIGNALS
U WARNING SYSTEMS

WARNING SYSTEMS
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines. p0329 A73-36922
Tactile information presentation using high pressure pulses into anti-G suit [AD-761796] p0369 N73-27969

WASHING
Evaluation of 165 deg F reverse osmosis modules for washwater purification. [ASME PAPER 73-ENAS-2] p0349 A73-37964
Reverse osmosis for wash water recovery in space vehicles. [ASME PAPER 73-ENAS-12] p0349 A73-37971

WASHOUT (RADIOACTIVITY)
U FALLOUT

WASTE DISPOSAL
Trash management during Skylab and long duration missions with compactors, autoclaves, biocides and isotope powered water recovery/waste management systems [ASME PAPER 73-ENAS-31] p0351 A73-37986
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle. [ASME PAPER 73-ENAS-42] p0351 A73-37989
Aerospace technology for solving domestic solid waste disposal, water purification, and water recovery problems p0075 N73-13849
Collection and disposal of human wastes in aesthetic and reliable manner to prevent degradation of crew performance p0106 N73-15111
Electrically conducting ceramics to heat biowaste propellants to 2000 K in resistojet thrustors for space station application [NASA-CR-112159] p0112 N73-15161
Environmental factors and cost problems of selecting optimum sanitary landfill site for solid waste disposal [NASA-CR-128744] p0189 N73-19157
Water reclamation and waste disposal technology applied to land use and aerospace engineering [NASA-CR-128857] p0190 N73-19158
Waste disposal and water reclamation technology for land use and aerospace engineering application [NASA-CR-128858] p0190 N73-19159
Reduced-gravity fecal collector seat and urinal [NASA-CASE-MFS-22102-1] p0222 N73-20141
Extraterrestrial disposal of radioactive waste from thermoelectric propulsion [NASA-TM-X-62272] p0366 N73-27943
Design and test performance of space crew waste collection system [NASA-CR-133977] p0366 N73-27945
Water recovery and solid waste processing for aerospace and domestic applications [NASA-CR-134027] p0420 N73-31016
Steam reactor system for manned spacecraft waste processing [NASA-CR-134048] p0440 N73-32021

WASTE UTILIZATION
Advanced methods of recovery for space life support systems. p0347 A73-37711
Waste Management System overview for future spacecraft. [ASME PAPER 73-ENAS-18] p0350 A73-37974
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management [ASME PAPER 73-ENAS-22] p0350 A73-37978
Biodegradation of cellulose fibers and reclamation of single cell protein from refuse through fermentation process [NASA-CR-130300] p0106 N73-15115
Thermal combustion requirements for burner devices of human vegetative waste products p0184 N73-19111
Antimicrobial phenyl preparations for human urine conservation during space flight p0184 N73-19112
Cosmonaut adaptation to dehydrated food products and effects on human waste cycle p0184 N73-19113
Water recovery and solid waste processing for aerospace and domestic applications [NASA-CR-134027] p0420 N73-31016
Systems design for advanced water recovery and waste processing in aerospace and domestic applications [NASA-CR-134028] p0420 N73-31017

WASTES
NT FECES
NT HUMAN WASTES
NT METABOLIC WASTES
NT RADIOACTIVE WASTES
NT SEWAGE
NT URINE

WATER
NT COLD WATER
NT POTABLE WATER
NT SEA WATER
Therapeutic value of mineral water diets especially Karlsbad Muhlbrunn water [NASA-TT-F-14620] p0069 N73-13079

Design and performance of prototype nitrogen/oxygen supply unit using water/hydrazine electrolysis to provide cabin leakage makeup in manned spacecraft
[NASA-CR-128688] p0112 N73-15159
Long term performance test on electrolytic oxygen generator for manned test chamber
[NASA-CR-128687] p0112 N73-15160
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119

WATER BALANCE
Water-salt homeostasis mathematical model, solving equations with analog and digital computers
p0166 A73-23941
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784
Russian book - Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature.
p0390 A73-41438
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
Physiological regulatory mechanisms of water and electrolyte levels in human body in high temperature environment
[NASA-TT-F-13915] p0592 N73-10066
Liquid retention in chlorpropamide therapy and water intoxication of patients
[NASA-TT-F-14597] p0609 N73-11077
Mortality rate of guinea pigs after decompression treatment as function of water balance
[DLR-FB-71-20] p0099 N73-14075
Radioimmunoassay of urinary antidiuretic hormone excretion in man considering water loading and dehydration effects
p0174 N73-18107
Human nitrogen and water/salt metabolisms in controlled regenerative atmosphere
p0181 N73-19089
Influence of immersion in temperature controlled bath on circulation and water balance in human body
[NASA-TT-F-14834] p0185 N73-19124

WATER CONSUMPTION
The effect of prolonged immobilization on diuresis and water intake in rats.
p0203 A73-26489
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278
Water load tests for determining hydration status and adrenal and kidney functions during post flight period
[NASA-TT-F-15091] p0417 N73-30998

WATER CONTENT
U MOISTURE CONTENT

WATER DEPRIVATION
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959

WATER FLOW
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576

WATER LANDING
NT DITCHING (LANDING)

WATER LOSS
Automatic temperature controller for liquid cooled garment based on total evaporative water loss during exercise
[NASA-TN-D-7311] p0299 N73-25126

WATER MANAGEMENT
Reverse osmosis for recovering and recycling water in Space Station Prototype Environmental Thermal Control/Life Support System Integrated Water and Waste Management
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Waste water processing and potable water management
[NASA-CR-128839] p0190 N73-19161
Upgrading and testing integrated water and waste management system
[NASA-CR-128878] p0222 N73-20142

WATER POLLUTION
Microbial contamination of water - Traditional and space-age problems and approaches.
[ASME PAPER 73-ENAS-33] p0351 A73-37988
Application of remote sensing techniques to public health
[NASA-CR-129822] p0099 N73-14069
Marine luminescence data for monitoring algal and pollutant concentrations
[NASA-CR-114578] p0297 N73-25114

WATER PURIFICATION
U WATER TREATMENT

WATER RECLAMATION
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
Advanced methods of recovery for space life support systems.
p0347 A73-37711
Reverse osmosis for wash water recovery in space vehicles.
[ASME PAPER 73-ENAS-12] p0349 A73-37971
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975
Hyperfiltration technique applied to wash water reclamation at elevated temperatures.
[ASME PAPER 73-ENAS-27] p0350 A73-37982
Trash management during Skylab and long duration missions with compactors, autoclaves, biocides and isotope powered water recovery/waste management systems
[ASME PAPER 73-ENAS-31] p0351 A73-37986
Aerospace technology for solving domestic solid waste disposal, water purification, and water recovery problems
p0075 N73-13849
Radiation oxidation of water impurities in moisture-containing products of human vital functions
p0134 N73-16051
Cost effectiveness of water reclamation subsystem in advanced aerospace life support systems
[NASA-CR-124098] p0177 N73-18134
Preservatives for human urine storage and water reclamation in spacecraft cabin
p0183 N73-19099
Oxidation of atmospheric impurities in space cabin and purity of reclamated water
p0183 N73-19104
Antimicrobial water reclamation methods for processing human urine
p0183 N73-19105
Water reclamation and waste disposal technology applied to land use and aerospace engineering
[NASA-CR-128857] p0190 N73-19158
Waste disposal and water reclamation technology for land use and aerospace engineering application
[NASA-CR-128858] p0190 N73-19159
Waste water processing and potable water management
[NASA-CR-128839] p0190 N73-19161
Upgrading and testing integrated water and waste management system
[NASA-CR-128878] p0222 N73-20142
Development of quality monitoring system for water recovery cycle in weightlessness environment
[NASA-CR-112267] p0222 N73-20144
Water recovery system for three man crew aboard spacecraft
[NASA-CR-128983] p0337 N73-26094
Methodology for predicting relevant contributions of cost elements in development of water recovery systems
[NASA-CR-124303] p0340 N73-27074

Bactericidal properties of sorbents in spacecraft water regeneration system
p0374 N73-29038
Water recovery and solid waste processing for aerospace and domestic applications
[NASA-CR-134027] p0420 N73-31016
Systems design for advanced water recovery and waste processing in aerospace and domestic applications
[NASA-CR-134028] p0420 N73-31017

WATER RECOVERY
U WATER RECLAMATION

WATER RESOURCES
Agroclimatology study of highlands of eastern Africa
[WMO-339] p0446 N73-33045

WATER TEMPERATURE
Aquatic and diving mammals in fresh water and marine environments, discussing aquatic thermal conditions, body temperature distribution, thermoregulation, metabolic heat production, etc
p0406 A73-42861

WATER TREATMENT
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
Advanced methods of recovery for space life support systems.
p0347 A73-37711
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964
Reverse osmosis for wash water recovery in space vehicles.
[ASME PAPER 73-ENAS-12] p0349 A73-37971
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975
Microbial contamination of water - Traditional and space-age problems and approaches.
[ASME PAPER 73-ENAS-33] p0351 A73-37988
Aerospace technology for solving domestic solid waste disposal, water purification, and water recovery problems
p0075 N73-13849
Tape cassette bacteria detection system for automatic continuous bacterial detection for monitoring sterility of regenerated water in spacecraft
[NASA-CR-134035] p0417 N73-30996
Raw water sewage treatment
[NASA-CASE-NPO-13224-1] p0419 N73-31011
Water recovery and solid waste processing for aerospace and domestic applications
[NASA-CR-134027] p0420 N73-31016

WATER VEHICLES
NT AIRCRAFT CARRIERS
NT LIFEBOATS
NT SHIPS
NT SUBMARINES

WAVE ATTENUATION
NT ACOUSTIC ATTENUATION

WAVE DIFFRACTION
Dynamic properties of human and animal middle ear in terms of acoustic impedance, transfer function, impulse response, sound diffraction and reflex sensitivity
p0244 A73-30279

WAVE FRONTS
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts and their detection on the body surface.
p0319 A73-36518

WAVE OSCILLATORS
U OSCILLATORS

WAVE PROPAGATION
NT LIGHT SCATTERING
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066

WAVE RADIATION
U ELECTROMAGNETIC RADIATION

WAVE SCATTERING
NT LIGHT SCATTERING
NT REVERBERATION

WAVEFORMS
NT PULSE AMPLITUDE
NT PULSE DURATION
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
Contingent negative variation expectancy waveform relation to human psychic state in response to visual and imperative acoustic stimuli
p0363 A73-39804
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664

WAVELENGTHS
The influence of wavelength on visual adaptation to spatially periodic stimuli.
p0200 A73-26199

WEAPON SYSTEMS
Performance measurement system for combat crew flight training in complex aircraft weapon systems, identifying training research goals
p0083 A73-16726
Russian book on rocket weapon systems safety handling covering HF electromagnetic, noise and vibration effects, ionizing radiation, fire, etc
p0393 A73-41874

WEBS (MEMBRANES)
U MEMBRANES

WEIGHT (MASS)
NT BODY WEIGHT
NT ORGAN WEIGHT

WEIGHT ANALYSIS
Evaluation of helmet weight on head by military personnel
[AD-748412] p0261 N73-22056

WEIGHTLESSNESS
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights.
p0582 A73-11209
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach.
p0196 A73-25342
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511
International literature survey of microbiological space research for 1930-1970, discussing high altitude balloon, rocket and satellite experiments, weightlessness effects, mutagenesis, etc
p0279 A73-31501
Space flight exercise regimen proposals, exploring moving picture/electric muscle stimuli program as earth gravity simulator in weightlessness
p0280 A73-31515
Annual Scientific Meeting, Las Vegas, Nev., May 7-10, 1973, Preprints.
p0287 A73-33421
Physiological effects of acceleration and weightlessness during space flight, discussing cardiovascular system, renal function, respiration, blood volume, metabolism, work capacity, etc
[AFOSR-72-2451TR] p0312 A73-35856
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963

Prolonged space flight and hypokinesia.
p0325 A73-36789
Inverted posture illusion phenomenon in astronauts during weightless space flight, discussing vestibular organ function, acceleration effects and body gravitation sensing system
p0356 A73-39149
Apollo 16 flight program for investigating physiological effects of prolonged weightlessness on central nervous system, vestibular, neuromuscular and cardiovascular functions, metabolism, radiation sensitivity and body weight
p0398 A73-42176
Comparison of development of auditory vesicle in frog embryos under weightless and terrestrial conditions
[NASA-TT-F-14624] p0592 N73-10072
Free electrophoresis in zero gravity on Apollo 16 flight
[NASA-CR-123920] p0606 N73-11055
Tests to determine physiological and behavioral response to transitions between rotating and nonrotating environments
[NASA-CR-2130] p0611 N73-11093
Prolonged weightlessness for 300 plus days and cardiac performance in primates
[NASA-CR-129512] p0063 N73-12075
Spacecraft environment, radiation, and weightlessness effects on human biological processes in manned space flight
[JPRS-57517] p0063 N73-12076
Free electrophoresis space experiment design for weightlessness environments
[NASA-CR-123972] p0101 N73-14090
Physiological effects of weightlessness
p0105 N73-15099
Effects of prolonged weightlessness during space flight on human skeletal and hematopoietic systems
[NASA-TT-F-730] p0107 N73-15116
Biosatellite 2 experiments for determining effects of prolonged weightlessness on biological processes
[CONF-720441-1] p0107 N73-15119
Evolution of neural messages in human adaptation to prolonged zero gravity flight
p0111 N73-15154
Nervous system functional changes due to forces of acceleration and weightlessness
[NASA-TT-F-733] p0148 N73-17105
Prolonged weightlessness effects on physiological functions of dogs
[NASA-TT-F-14672] p0149 N73-17110
Weightlessness effects on development of vestibular apparatus and ocular nystagmus in rat, using chronic 2g centrifuge
[NASA-CR-114569] p0149 N73-17112
Radionuclide measurements on plasma and red cell mass volume losses in Apollo spacecrews
p0174 N73-18106
Skylab experiments to assess weightlessness effects on human nutritional metabolism and musculoskeletal function
p0175 N73-18115
Medical and biological problems of manned space flight
[NASA-TT-F-719] p0180 N73-19077
Weightlessness and hypodynamia effects on bodily functions during space flight
p0180 N73-19078
Reduced-gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] p0222 N73-20141
Development of quality monitoring system for water recovery cycle in weightlessness environment
[NASA-CR-112267] p0222 N73-20144
Microbiological investigation of neutral buoyancy simulator for weightless space environment testing
[NASA-TM-X-64736] p0229 N73-21127
Techniques for determining effects of prolonged weightlessness on cardiovascular system of subhuman primates
[NASA-CR-131890] p0252 N73-21980
Basic causal mechanisms responsible for loss of vascular tone during alterations in shifts to zero gravity
[NASA-CR-128897] p0267 N73-23069
Effects of weightlessness and acceleration on human body during space flight
p0371 N73-29022
Tape cassette bacteria detection system for automatic continuous bacterial detection for monitoring sterility of regenerated water in spacecraft
[NASA-CR-134035] p0417 N73-30996
Design, fabrication and acceptance testing of zero gravity whole body shower
[NASA-CR-134066] p0420 N73-31019

WEIGHTLESSNESS SIMULATION
Respiration mechanics during weightlessness simulation in an immersion medium
p0124 A73-20986
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Changes in lung capacity, air passage resistance, and dynamic compliance of humans during water immersion to simulate weightlessness
p0135 N73-16053
Conference on human endocrine secretions and hormone metabolisms during space flight stress
[NASA-TM-X-58093] p0173 N73-18104
Water immersion model for simulating renin, aldosterone, and natriuresis effects of prolonged weightlessness on man
p0174 N73-18110
Human oxygen metabolism and pulmonary functions during hypodynamic water immersion
p0181 N73-19082
Medical biological and other problems of space flight
[JPRS-58678] p0224 N73-21089
Problems in simulating weightlessness
p0224 N73-21090
Physiological effects of long term hypodynamic weightlessness simulation on humans
p0255 N73-22010
Human horizontal or antiorthostatic position effect in hypodynamic weightlessness test
p0255 N73-22011
Human regional blood circulation changes during bed rest experiment
p0255 N73-22012
Metabolic changes and cardiac output of humans in hypokinetic bed rest study
p0255 N73-22013
Visual acuity changes in humans during hypokinetic bed rest test
p0255 N73-22014
Functional reactions of human otorhinolaryngolic organs during hypokinesia
p0256 N73-22015
Human pulmonary volume decrease during long term bed rest
p0256 N73-22016
Lower body negative pressure for preventing body fluid shifts during weightlessness
p0256 N73-22017
Weightlessness simulator for evaluating exercise effects in hypokinetic bed rest test
p0256 N73-22018
Changes in human cerebral circulation during prolonged bed rest test
p0256 N73-22020
Long term hypokinesia effect on rats hemodynamic system
p0262 N73-23026
Human habitability data for zero gravity environmental architecture
[NASA-TM-X-69322] p0295 N73-24135
Wing anomalies as result of weightlessness simulation for flour beetle Tribolium confusum
p0367 N73-27952
Single body theory for weightlessness simulation, applied to simple cell model
p0368 N73-27961

WELDING
NT ELECTRON BEAM WELDING
WEST GERMANY
U GERMANY
WESTLAND AIRCRAFT
NT P-531 HELICOPTER
WESTLAND P-531 HELICOPTER
U P-531 HELICOPTER

WETNESS
U MOISTURE CONTENT
WETTING
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
WHEAT
Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat
p0378 N73-29335
WHEATSTONE BRIDGES
Photoelectric servo simulator for pupil, using Wheatstone bridge with CdS light dependent resistor
p0246 A73-30399
WHIRL
U ROTATION
WHIRLING
U ROTATION
WHITE BLOOD CELLS
Differentiations and maturations in red and white blood cells construction in red bone marrow, noting hematopoietic system formation from single source cell
p0085 A73-17473
WHITE NOISE
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334
WIGNERIAN THEORY
U QUANTUM THEORY
WILDLIFE
NT BATS
NT BIRDS
NT CHIMPANZEES
Multispectral remote sensing techniques applied to study changes in wildlife habitats
p0142 N73-16396
Conservational and rational use of natural resources and wildlife to preserve biosphere environment
[JPRS-58429] p0222 N73-20145
WILDLIFE RADIOLOCATION
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134
Satellite system for tracking of wildlife and birds in natural environment
[NASA-CR-130301] p0104 N73-15090
Bibliography of wildlife movements and tracking systems
[NASA-CR-130380] p0133 N73-16040
WIND EFFECTS
Examination of physical processes governing heat transfer through air-penetrable clothing in wind
[DRIC-TRANS-2921] p0113 N73-15166
WING TANKS
Technical and safety aspects of maintenance work on commercial aircraft wing fuel tanks, considering wing deformation effects and sealant materials and reapplications
p0329 A73-36932
WINGS
Wing anomalies as result of weightlessness simulation for flour beetle Tribolium confusum
p0367 N73-27952
WIRE BRIDGE CIRCUITS
NT WHEATSTONE BRIDGES
WOMEN
U FEMALES
WORDS (LANGUAGE)
Color naming latencies with brief exposures of individual Stroop and control stimuli
[AD-745106] p0596 N73-10094
WORK
NT PHYSICAL WORK
WORK CAPACITY
Russian papers on human adaptability covering altitude and temperature acclimatization, work capacity and anthropogenetic and medicogenetic factors
p0584 A73-11921
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
Exercise testing for evaluation of cardiac performance.
p0043 A73-13538
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718
Work requirements test program for operator proficiency in tasks analogous to aircraft piloting under difficulty variation, deriving workload capability limits
p0082 A73-16722
Transinformation and real time identification applied to the study of pilot workload
p0085 A73-17195
Statistical correlations of maximum oxygen consumption, body weight and endurance /work/ performance in exercise-oxygen studies
p0096 A73-18472
German monograph - Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability.
p0122 A73-20388
Diurnal psychic working capacity dynamics under conditions of continuous 72-hr wakefulness
p0124 A73-20989
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
German monograph - Investigation concerning a consideration of the human circadian rhythm by means of a variable working time.
p0240 A73-29283
Oxygen consumption alteration effects on human endurance capacity as function of relative work, muscle blood flow and anaerobic metabolism
p0241 A73-29753
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases.
p0247 A73-30515
Relationship of physiological strain to change in heart rate during work in the heat.
p0283 A73-32548
Effect of maximal work load on cardiac function.
p0288 A73-33991
Physical energy expenditure in long-haul cabin crew.
p0326 A73-36793
The capacity for muscular work in acute hypoxia
p0331 A73-36946
Pilot workload and performance measures in terms of physiological activity in flight deck environment for reduced aircraft accidents due to human error
p0347 A73-37732
Pilot workload immediate, duty day and long term period evaluation from heart rate, subjective, psychological, biochemical stress and sleep pattern measurements
p0347 A73-37734
Comparison of the job attitudes of personnel in three air traffic control specialties.
p0355 A73-39108
Human intrapair twin differences, examining age, height, weight, heart volume, metabolism, respiratory rate and monozygous/dizygous differences
p0361 A73-39792
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
Work-heat tolerance derived from interval training.
p0400 A73-42416
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418
The effect of anxiety control on the level of information processing
p0425 A73-43848

Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062
Optimization of work-rest cycles to ensure acceptably high human performance in man machine systems
[AD-750176] p0103 N73-14107
Time-span of discretion as measure of military work and responsibility
[DRAE-M45] p0260 N73-22049

WORK DECREMENT
U WORK CAPACITY

WORK-REST CYCLE
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
Adenonucleotides, NAD+, and NADH in skeletal muscles during intensive work and at rest
p0116 A73-19475
Determination of the optimal time of continuous work for operators in man-machine systems
p0157 A73-22849
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Astronauts diurnal life cycle inversion during space flight missions, considering social factors and work-rest cycle effects
p0208 A73-27715
Bactericide activity of the integument of man at different times of the day
p0209 A73-27716
German monograph - Investigation concerning a consideration of the human circadian rhythm by means of a variable working time.
p0240 A73-29283
Work-rest cycle effects on airline pilots performance, considering central nervous system changes measurement techniques
p0282 A73-32059
Circadian rhythms in human mental performance from waking day, round of clock and simulated shiftwork studies
p0286 A73-33156
Industrial work rhythm and between-day fluctuation studies 1920-1969, emphasizing industrial record and between-day fluctuations
p0287 A73-33160
Investigation of the possibility of human adaptation to a 16-hour day
p0305 A73-34238
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
Sleep loss in air cabin crew.
p0355 A73-39109
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Ventilation at transition from rest to exercise.
p0436 A73-45375
Analysis of arterial hypoxemia caused by pulmonary malfunctions and regulation of oxygen during exercise and rest
[AD-746979] p0071 N73-13092
Optimization of work-rest cycles to ensure acceptably high human performance in man machine systems
[AD-750176] p0103 N73-14107
Industrial model for leave and overtime taking behavior of employees exposed to peak work activity periods in relation to health, demography, and job variables
p0143 N73-17055
Role of social synchronizers in adaptation process of humans to inversion of diurnal sleep and wakefulness regime
p0218 N73-20109
Work-rest schedules for military tracking crews under prolonged vibration
p0271 N73-23986
Work-rest schedule for optimum performance of monitoring tasks
p0271 N73-23987
Effects of work-rest schedules, circadian rhythms, continuous work, and sleep loss on sustained performance
p0271 N73-23988
Physiological response to prolonged muscular activity
p0271 N73-23990
Phytological and physiological problems caused by rest-work cycles of cosmonauts during space flight
[NASA-TT-F-14990] p0336 N73-26093
Human body temperature dynamics in adaptation to changed work-sleep cycles
p0373 N73-29036
Scheduling of work-rest cycle for cosmonauts during space flights
p0416 N73-30984

WORMS
Physiological responses of parasitic worms and their larvae to solar ultraviolet irradiation and space flight stress
p0291 N73-24106

WOUND HEALING
Low calcium diet produced chronic decalcification effect on osseous repair of experimentally induced cortical bone defect in chickens
p0313 A73-35981

X

X RAY ANALYSIS
X ray data refinement on proteins, discussing backbone and side chain dehedral angles adjustment by least squares fitting to relieve atomic overlaps
p0308 A73-34893

X RAY APPARATUS
Electrofluoroplanigraphy for human body layer single-plane sections synchronization, using X ray tomography and TV imaging followed by roentgenogram electronic summation
p0389 A73-41216

X RAY FLUORESCENCE
X ray fluorescence analysis for determining lead content of paint on pencils in Goddard supply system
p0148 N73-17097

X RAY FLUORESCENCE ANALYSIS
U X RAY ANALYSIS
U X RAY FLUORESCENCE

X RAY IRRADIATION
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat.
p0587 A73-12187
Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation
p0047 A73-13824
Russian book on auto-antibodies of X ray irradiated animal and human blood and organisms covering cell formation, isolation, preparations, sickness treatment and auto-immune reactions
p0060 A73-15711
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
Immunological effectiveness of X ray irradiation on histocompatibility of mice skin transplants
p0255 N73-22008

X RAY PHOTOGRAPHY
U PHOTOGRAPHY
U RADIOGRAPHY

X RAYS
X ray effect on animal resistance to anoxic, anemic, and histotoxic hypoxia
p0215 N73-20087

Y

YAW
Visual and vestibular effects in human oculomotor response during head rotation in yaw and roll
p0110 N73-15147
Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
YAWMETERS
U ATTITUDE INDICATORS
U YAW
YEAST
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
Biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068
Growth response of bacteria and yeast in high pressure helium-oxygen environment
[AD-745334] p0596 N73-10096
Dosimetric analyses for Biosatellite 2 yeast and artemia radiation exposure experiment
[NASA-CR-127142] p0069 N73-13082
YEMEN
Psychological and personality test results and problems in selection of pilots, air traffic controllers, and technicians from Yemen
p0368 N73-27956
YHU-1 HELICOPTER
U UH-1 HELICOPTER
YIELD
Use of soil-vegetation system brightness coefficients to measure vegetation quantity and crop yield
p0378 N73-29334
Influence of solar radiation in mountainous areas on crop capacity and grain yield of spring wheat
p0378 N73-29335
YOUNG MODULUS
U MODULUS OF ELASTICITY
YUH-1 HELICOPTER
U UH-1 HELICOPTER

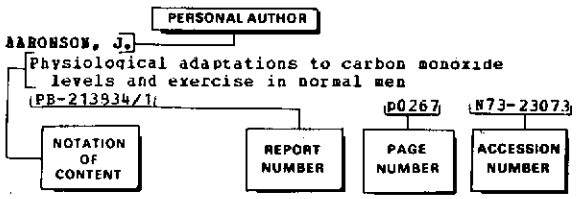
Z

ZERO GRAVITY
U WEIGHTLESSNESS

Personal Author Index

AEROSPACE MEDICINE AND BIOLOGY / *a continuing bibliography* JANUARY 1974
1973 Cumulative Index

Typical Personal Author Index Listing



The Notation of Content (NOC), rather than the title of the document, is used to provide a more exact description of the subject matter. The NASA or AIAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of *Aerospace Medicine and Biology*. The page number indicates the exact page on which the abstract is found. If applicable, a report number is also included as an aid in identifying the document.

A

AARONSON, J.
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213934/1] p0267 N73-23073
ABADI, R. V.
Linear summation of spatial harmonics in human vision.
p0345 A73-37411
ABBAS, DR.
Retinal arterial pressure - Orthostatic hypotension and fatigue /Preliminary study/
p0586 A73-12156
ABBINK, F.
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036
ABBOUD, F. M.
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997
ABDULLAEV, G. B.
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724
ABERMAN, A.
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
ABIDIN, B. I.
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide
p0280 A73-31519
Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions
p0063 N73-12077
Effect of certain gaseous toxic substances on the resistance of animals to acute hypoxic hypoxia
p0182 N73-19096
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats
p0254 N73-22004
Effect of preliminary exposure to carbon monoxide on development of hypokinetic disorders in white rats
p0255 N73-22007
Effect of restriction of motor activity of animals on their tolerance to an acute exposure to carbon monoxide
p0264 N73-23043
Influence exerted on the animal body by continuous and discontinuous exposure to carbon monoxide
p0442 N73-33019
ABILDSKOV, J. A.
Central nervous system influence upon electrocardiographic waveforms.
p0320 A73-36530
ABRAHAM, R.
Fractioning and determination of corticosteroids in urine by thin layer chromatography
[RAE-LIB-TRANS-1694] p0333 N73-26062
ABRAHAM, S.
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054
ABRAMOV, I.
Retinal mechanisms of colour vision.
p0161 A73-23316
ABRAMS, H. L.
What mediates the renal vascular response to a salt load in normal man.
p0577 A73-10170
The complications of coronary arteriography.
p0399 A73-42343
ABRAMS, W. B.
Drug therapy of power failure.
p0321 A73-36546
ABROSIMOV, V. V.
Energy cost of muscle work in a state of fatigue
p0080 A73-16697
ABULADZE, G. V.
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657
ABZIANIDZE, Y. V.
The effects of electrical activity and excitability of certain limbic and mid-brain structures during various phases of sleep
p0257 N73-22031
ACHMADIEVA, A. M.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
ACKERMAN, L. J.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085
ACTON, M. I.
Studies in hearing conservation.
p0309 A73-35326
ADACHI-USAMI, E.
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
ADACHI, M. M.
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] p0101 N73-14092
ADAIR, E. R.
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535

ADAMIAN, F. A.
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves p0349 A73-37941
Evoked potentials in the hypothalamus and mesencephalic reticular formation upon stimulation of the vagus nerve p0389 A73-41263
ADAMOVICH, B. A.
Advanced methods of recovery for space life support systems. p0347 A73-37711
ADAMS, A. E.
Language and brain - Principles, system theories, and their boundaries p0126 A73-21425
ADAMS, D.
Conceptual design study for a teleoperator visual system, phase 1 [NASA-CR-124059] p0150 N73-17117
ADAMS, D. F.
What mediates the renal vascular response to a salt load in normal man. p0577 A73-10170
The complications of coronary arteriography. p0399 A73-42343
ADAMS, J. A.
Research and the future of engineering psychology [AD-748237] p0074 N73-13121
ADAMS, J. D.
Myocardial metabolism during exposure to carbon monoxide in the conscious dog. p0159 A73-22935
Coronary flow and left ventricular function during environmental stress. p0162 A73-23380
ADAMS, M. H.
A simplified method for the in vitro calibration of electromagnetic flowmeters. p0205 A73-27027
ADARO, F.
Gas-blood CO2 equilibration in dog lungs during rebreathing. p0048 A73-14115
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models. p0391 A73-41639
ADELMAN, A. G.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms. p0089 A73-17860
ADES, H. W.
Auditory system p0105 N73-15105
ADEY, W. R.
Organization of brain tissue - Is the brain a noisy processor. p0194 A73-25143
Investigative methods in space biology and medicine: Transmission of medical data [NASA-TT-F-14996] p0338 N73-27057
ADKINS, C. J.
Verbal estimations of time at four spatial distances. p0044 A73-13552
ADLER, F. O.
Energy balance and change in body weight and body water in man during a 2-day cold exposure. p0433 A73-45059
ADO, A. D.
The effects of bilateral destruction of certain medial-hypo halamus structures on the formation of complement-binding antibodies p0117 A73-19647
APANAS'EV, G. G.
Primary and initial processes of the biological action of radiation p0312 A73-35896
APSCHRIPT, H.
Peak expiratory flow rate and rate of change of pleural pressure. p0391 A73-41636
AGADZHANIAN, N. A.
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia p0249 A73-30840
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia p0279 A73-31511
AGADZHANYAN, N. A.
Medicine and space [NASA-TT-F-735] p0175 N73-18116
Changes in the resistance of the organism to extreme effects during prolonged acclimatization to hypoxia [NASA-TT-F-14861] p0219 N73-20123
Effect of protein quality in the ration of rats on their tolerance of acute hypoxia p0263 N73-23035
V. V. Streltsov: The founder of the Soviet School of Aviation-Space Medicine [NASA-TT-F-15101] p0417 N73-30991
AGARWAL, G. C.
Further observations on the relationship of EMG and muscle force p0599 N73-10117
AGHA, A. S.
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome. p0587 A73-12445
AGHEMO, P.
The effect of O2 breathing on maximal aerobic power. p0583 A73-11504
AGIN, G. J.
Representation and description of curved objects [AD-755139] p0223 N73-20152
AGOSTONI, A.
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol. p0429 A73-44689
AGRE, A. L.
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method p0184 N73-19110
AGRESS, C. M.
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress. p0390 A73-41565
AIT'IAN, S. KH.
A formalism of correlative functions for describing neuron networks p0389 A73-41277
AKABORI, S.
Model experiments on the prebiological formation of protein. p0090 A73-17931
AKABOSHI, S.
Research and development of radiation-protective agents (now becoming available as oral drugs [NRC-TT-1609] p0106 N73-15112
AKAGI, J. M.
Spin-labeling studies on the membrane of a facultative thermophilic bacillus. p0119 A73-20027
AKHMATOVA, M. A.
The toxic action of gaseous products of the vital activity of an organism p0183 N73-19101
AKHMETOV, K. ZH.
Diurnal rhythm oscillations of fat metabolism indices in healthy young men p0117 A73-19646
AKHUTIN, E. A.
Biomedical problems of space flights: Index of domestic and foreign literature p0062 A73-16034
AKHUTIN, V. A.
Medical-biological problems of spaceflight: An index to the Russian and foreign literature [NASA-TT-F-14662] p0265 N73-23053
AKIMOV, G. A.
Reaction of the central nervous system to mechanical effects p0304 A73-34227
Disorders of the nervous system in decompression disease [AD-744298] p0594 N73-10086
Central nervous system reaction to mechanical factors p0372 N73-29024

AKOEV, I. G.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
AKSENOV, S. I.
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
AL-ABBAS, A. H.
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032] p0136 N73-16065
Spectra of normal and nutrient-deficient maize leaves
[NASA-CR-132145] p0293 N73-24119
AL'TMAN, E. I.
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576
AL'TMAN, IA. A.
Electrophysiological investigation of noise rejection in an auditory system receiving sound from a localized source
p0156 A73-22580
ALBERS, J. W.
The use of a battery of tracking tests in the quantitative evaluation of neurological function
p0599 N73-10118
ALBUS, J. S.
A robot conditioned reflex system modeled after the cerebellum.
p0092 A73-18065
The control of a manipulator by a computer model of the cerebellum.
p0344 A73-37333
ALDEN, C. L.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085
ALDER, A. V.
Human factors evaluation of laser protective visors
[AD-751470] p0142 N73-16102
ALDRIDGE, J. L.
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
ALDRIDGE, J. M.
Bandwidth reduction of sleep information, Volume 2
[AD-740946] p0605 N73-10167
ALDRICH, B. E.
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125
ALEEV, L. S.
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
Nonlinear method of analyzing electroencephalograms
p0580 A73-10661
Ways of enhancing the efficiency of physical exercise
p0280 A73-31515
ALEKSEEVEV, S. V.
Noise and noise sickness
[NASA-TT-F-748] p0365 N73-27935
ALEKSANDER, I.
Random logic nets - Stability and adaptation.
p0122 A73-20400
ALEKSANDROVA, M. P.
State of blood filling and bioelectric activity of the brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic-vascular dysfunction
p0443 N73-33027
ALEKSANDROVSKAIA, M. M.
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653
ALEKSANYAN, Z. A.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029
ALEKSEEV, M. A.
The interaction between muscle groups in a complex motor act in humans
p0125 A73-21320
ALEKSEEV, V. M.
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663
ALEXANDER, M.
Resistance of soil microorganisms to starvation.
p0589 A73-12627
Quarantine for samples from Mars.
p0056 A73-14321
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959
ALEXANDER, R. E.
Medical examinations for radiation workers
p0143 N73-17050
ALEXANDER, S. S.
Long term clinical relationships of the ventricular premature beat
p0146 N73-17083
ALEXANDER, W. C.
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
Functional preservation of vascular smooth muscle tissue
[NASA-CR-128897] p0267 N73-23069
ALEYEV, L. S.
Ways to increase effectiveness of physical training
p0263 N73-23039
ALGER, D. L.
A high yield neutron target for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067
ALIFANOV, V. I.
Changes of the automatism, excitability and conductivity of the myocardium in hypoxic hypoxia
p0253 N73-21985
The kinematics of cardiac contractions in healthy persons and patients during hypoxic hypoxia
p0253 N73-21986
Problems of blood circulation biophysics during hyperbaric oxygen breathing
p0253 N73-21993
ALIKIAN, E. S.
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
ALIYEV, M. A.
Hypertonia and atherosclerosis under high mountain conditions
[NASA-TT-F-745] p0176 N73-18121
ALKOV, R. A.
Are there accident-prone pilots.
p0083 A73-16732
ALLAN, J. H.
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159
The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
ALLEN, C. L.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056
ALLEN, G.
Chemical evolution under the bion hypothesis.
p0055 A73-14316
Early thoughts on compound strains
p0188 N73-19144
ALLEN, J. C.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
ALLEN, H. P.
Information yield of the Annual Medical Examination for Flying.
p0356 A73-39110

ALLEN, R. D.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064
ALLEN, R. E.
Effect of vertical active vibration isolation on tracking performance and on ride qualities
[NASA-CR-2146] p0066 N73-12109
ALLEN, R. W.
Effects of display format on pilot describing function and remnant
p0599 N73-10123
Visual motor response of crewmen during a simulated 90 day space mission as measured by the critical task battery
p0601 N73-10133
Visual-motor response of crewmen during a simulated 90-day space mission as measured by the critical task battery
[NASA-CR-2240] p0295 N73-24134
ALLISON, J. L.
Effect of maximal work load on cardiac function.
p0288 A73-33991
ALLISON, T.
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses
[AD-746302] p0610 N73-11082
ALLKOFER, O. C.
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
The Biostack experiment on Apollo 16.
p0399 A73-42185
ALLNUTT, M. F.
The effects of core temperature elevation and thermal sensation on performance.
p0283 A73-32396
Emotional and cardiovascular stresses of centrifugation: Effect of beta receptor blockade on heart rate response
p0188 N73-19149
ALLUISI, E. A.
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
Applicability of research on sustained performance, endurance, and work-rest scheduling to the development of concepts and doctrine of continuous operations
p0271 N73-23988
ALONAE, A.
Effect of monochromatic light on blood constants
[NASA-TT-F-14941] p0297 N73-25111
ALPERN, M.
Rod vision.
p0079 A73-16479
ALTERESCU, S.
Medical Information Management System (MIMS): A generalized interactive information system
[NASA-TM-X-66076] p0604 N73-10156
ALTMAN, F.
Some aversive characteristics of centrifugally generated gravity.
p0238 A73-28506
ALYAKRINSKIY, B. S.
Problems of social psychology in space
p0444 N73-33032
AMALDI, F.
Base composition of ribosomal RNA and evolution.
p0116 A73-19220
AMBLER, R. K.
Assessment of reactions to vestibular disorientation stress for purposes of aircrew selection
p0225 N73-21096
The use of confidential instructor ratings for the prediction of success in naval undergraduate pilot training
[AD-757693] p0296 N73-24146
AMDUR, M. O.
Toxicology of atmospheric sulfur dioxide decay products
p0099 N73-14071
AMENDE, I.
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
AMIROV, R. Z.
Integral topograms of heart potentials
p0401 A73-42489
AMORE, J. E.
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
AMPLATZ, K.
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
AMTMANN, E.
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
ANANIN, V. F.
Involuntary eye movements in the presence and absence of points
p0322 A73-36568
ANANINA, V. N.
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
ANANYEV, G. V.
Cerebral hemodynamics during 120 day clinostatic hypokinesia
p0256 N73-22020
ANDERSEN, I.
Human perception of humidity under four controlled conditions.
p0089 A73-17864
ANDERSON, A. R.
Intermediate water recovery system
[NASA-CR-128983] p0337 N73-26094
ANDERSON, G. L.
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
ANDERSON, H.
Cardiac innervation and synaptic transmission in heart.
p0198 A73-25597
ANDERSON, H. T.
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
ANDERSON, P. A. W.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
ANDERSON, P. J.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056
ANDERSON, R. A.
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
ANDERSON, R. E.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112
ANDERSON, W. B., JR.
Effect of elimination of nitrogen and/or hypoxia or restricted visual environment on color vision and range of accommodation
[NASA-CR-128896] p0258 N73-22037
ANDERSSON, R. G. G.
Relationship between cyclic AMP, phosphodiesterase activity, calcium and contraction in intestinal smooth muscle.
p0385 A73-41130
ANDRAE, B. O.
Ambient temperature rise effects on pilot performance in a flight simulator
p0331 A73-36948
ANDRASI, A.
Whole body counter efficiency calculations for distributed sources in a human phantom
[KFKI-72-30] p0067 N73-12114
ANDREYTSOV, V. A.
Pulmonary volumes of human subjects restricted to an antiorthostatic position with application of different counteracting agents

p0256 N73-22016

ANDREWS, D. P.
Acuities for spatial arrangement in line figures - Human and ideal observers compared.
p0129 A73-21564

ANDREYEVAGALANINA, Y. T.
Noise and noise sickness
[NASA-TT-F-748] p0365 N73-27935

ANGAUT, P.
Anatomo-functional bases of cerebello-cerebral interrelations
p0282 A73-32287

ANGELAKOS, E. T.
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369

ANGELL, J. B.
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649

ANGIBOUST, M.
Is performance a sufficient index to estimate the effects of stresses on the central nervous system
p0128 A73-21542

Gaze-positioning eye movement perturbations during somnolence states
p0332 A73-36950

Modifications of performance under certain medications: Proposed measuring method
p0227 N73-21110

ANIKEEVA, I. D.
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997

Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

ANIKIN, L. S.
Evaluation of the physical conditions of individual airmen
p0425 A73-43790

ANISIMOV, B. V.
Chemical means of prophylaxis of radiation sickness
p0212 N73-20065

Pharmacological properties of substances for medicinal prophylaxis of radiation damage
p0212 N73-20066

ANISIMOV, E.
First the testers fly
p0224 N73-21090

ANICHKOVSKII, E. P.
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655

ANLIKER, M.
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066

ANNAYEV, B.
Studies of conformational transitions of cytochrome c by the spin-label method
[NASA-TT-F-14623] p0065 N73-12099

The molecular organization of the active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042

ANOKHIN, P. K.
The mechanisms and principles of goal-directed behavior
[JPRS-60091] p0447 N73-33053

ANSTIS, S. M.
A simple simulator of the pupil.
p0246 A73-30399

ANTES, J. R.
Information processing in the visual periphery.
p0304 A73-34150

ANTHONISEN, N. R.
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334

Effects of increased external airway resistance during steady-state exercise.
p0400 A73-42417

ANTHONY, H. V.
Surface contaminants.
p0096 A73-18547

ANTIKOVA, V. A.
Changes in respiration effectiveness during muscular activity
p0323 A73-36580

ANTIMONII, G. D.
Central mechanisms of the action of electromagnetic fields
p0248 A73-30571

ANTIPOV, V. V.
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090

Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815

Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061

Antiradiation effectiveness of cystamine under various conditions of gamma irradiation
p0212 N73-20067

Influence of gamma radiation on the elimination of the toxic effect of cystamine
p0213 N73-20070

Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072

Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076

ANTONENKO, L. I.
Changes in the vascular tone of certain organs during experimental embolism of pulmonary circulation
p0154 A73-22366

ANTONIAN, A. A.
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508

ANTONOV, I. I.
Mechanisms of disturbance of the thermoregulating function of the organism under reduced barometric pressure
p0254 N73-21996

ANTONYAN, A. A.
Investigation of the effect of increased oxygen concentrations on chlorella metabolism
p0262 N73-23032

APEL, G.
Syringomyelia and flying fitness
p0266 N73-23061

APPLETON, B.
Predicting visual performance in aviators (color vision)
p0180 N73-19074

ARCHIE, J. P., JR.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661

ARDAKANI, M. S.
Enzyme activity in terrestrial soil in relation to exploration of the Martian surface
[NASA-CR-128399] p0591 N73-10059

ARDEN, G. B.
The visual system: Neurophysiology, biophysics, and their clinical applications; Proceedings of the Ninth Symposium, Brighton, England, July 1971.
p0236 A73-28351

A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357

AREF'EVA, A. M.
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681

ARENS, H.
Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613

ARISAN, T.
An analysis of blood flow.
p0042 A73-13302

ARINCHIN, N. I.
A new phenomenon of an active intraorgan pumping function of skeletal muscles
p0206 A73-27446

ARIZA, D.
Polyparametric information of the

electrocardiogram in injured tissue.
p0405 A73-42834
ARKHANGELSKIY, D. Y.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning
p0182 N73-19095
ARKHANGELSKIY, V. V.
Dosimetry of space radiations
p0173 N73-18100
ARMSTRONG, H. B.
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
ARMSTRONG, T. G.
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596
ARMSTRONG, T. H.
Radiation transport codes for potential applications related to radiobiology and radiotherapy using protons, neutrons, and negatively charged pions
[NASA-CR-130965] p0176 N73-18127
ARMSTRONG, W.
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735
ARNBERG, P.
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213
ARNDT, G. D.
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408
ARNDT, R. L.
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024
ARNOLD, E. L.
The analysis of L-3-hydroxytyrosine (L-dopa) and its metabolites
[AD-745944] p0066 N73-12105
Analysis of soluble beryllium by gas chromatography
[AD-753112] p0177 N73-18131
ARNOLD, G.
Stress recovery of human tendons after relief - Mechanical recovery
p0119 A73-20033
ARNOLDI, L. B.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
Leave taking and overtime behavior as related to demographic, health, and job variables
p0143 N73-17055
Normally expected aberrations in the 8-hour dynamic EKG
p0145 N73-17066
The management of NASA employee health problem; status 1971
p0146 N73-17079
The motivating influence of retest and repeated dietary counseling on cholesterol reduction
p0146 N73-17081
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091
ARONOV, Y. I.
Some principles involved in the construction of unamplified control systems for electromechanical manipulators
p0335 N73-26080
ARONOVA, M. Z.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
ARONOW, W. S.
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802
Thirty-month follow-up of maximal treadmill stress test and double Master's test in normal subjects.
p0130 A73-21803
ARROTTA,
Microelectrophoresis of human erythrocytes: Importance and uses in obstectrics and gynecology
[NASA-TT-F-14587] p0069 N73-13077
ARTEMENKO, D. P.
Participation of hippocampal neurons in theta-wave generation
p0118 A73-20005
ARTOBOLEVSKIY, I. I.
Mechanics of Machines, no. 27/28
[NASA-TT-F-14336] p0335 N73-26073
Second Symposium on the Theory and Principles of Manipulator Design (February 8-9, 1968)
p0335 N73-26074
ARUSHANIAN, E. B.
Some aspects of the participation of the neostriatum in behavior regulation
p0581 A73-11025
ARUTIUNIAN, R. K.
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
ARZUMANOV, IU. L.
Role of associations in the formation of evoked potentials from the human cerebral cortex
p0362 A73-39798
ASCHOFF, J. C.
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
ASHARE, A. B.
Performance of the anti-G valve when subjected to varying lateral forces
[AD-760814] p0377 N73-29062
ASHBURN, W. L.
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
ASHKENAZI, E. K.
Anisotropy of compact bone material
p0045 A73-13744
ASKEW, E. W.
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
ASRAYAN, E. V.
Use of motivational relations to find the acceptor of action
p0448 N73-33064
Relation of conditioned reactions to evaluation of results of forthcoming reinforcement
p0449 N73-33065
Features of the behavior of dogs when given a choice of various reinforcements
p0449 N73-33066
ASMUSSEN, E.
Ventilation at transition from rest to exercise.
p0436 A73-45375
ASTRAND, I.
Exercise ECG - Its prognostic significance.
p0405 A73-42835
ASYAMOLOV, B. F.
Negative pressure on the lower part of the body as a method for preventing shifts associated with change in hydrostatic blood pressure
p0256 N73-22017
ASYAMOLOVA, N. M.
Effect of certain gaseous toxic substances on the resistance of animals to acute hypoxic hypoxia
p0182 N73-19096
ATABEK, H. B.
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640
ATAIAN, D.
Two components and two stages in search performance - A case study in visual search.
p0435 A73-45339

ATKINSON, J.
Visibility of an afterimage alone and in the presence of one or two additional afterimages. p0153 A73-21894
Properties of human visual orientation detectors - A new approach using patterned afterimages. p0239 A73-29124
Factors affecting processing mode in visual search. p0311 A73-35493
ATLAN, H.
Effects of heavy ions on bacteria. p0399 A73-42184
ATNAGULOV, R. IA.
Methods of analyzing the formation process of conditioned reflexes to time intervals p0093 A73-18166
AUDET, N. F.
Environmental control unit for damage control suit system [AD-749025] p0075 N73-13125
Damage control suit system [AD-762428] p0370 N73-27976
AUERBAHN, N.
Clairvoyant perception of target material in three states of consciousness. p0044 A73-13555
AUPPRET, R.
Fatique in flight personnel during long flights p0585 A73-12153
Fractures of the spine during flight /concerning two cases encountered during pumping/ p0586 A73-12154
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport p0331 A73-36947
Physiological modifications during operational flights of long duration p0189 N73-19152
Modifications of performance under certain medications: Proposed measuring method p0227 N73-21110
Effect of altitude on cerebral blood flow patterns in the smoker and non-smoker p0229 N73-21125
AUSE, N. H.
Human engineering computer aided design /HECAD/. p0082 A73-16721
An exploratory study of arm-reach dynamics under several levels of gravity. p0424 A73-43218
AUSTIN, W. H.
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460
AVDEEV, G. G.
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load p0249 A73-30841
AVETISIAN, E. A.
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves p0349 A73-37941
AVIADO, D. M.
Cardiopulmonary effects of fluorocarbon compounds [AD-751426] p0140 N73-16089
AVTONOMOVA, V. A.
Experimental investigation of the characteristics of the visual recognition of images p0428 A73-44667
AYFORD, J. G.
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin. p0057 A73-15024
AYDARALIYEV, A. A.
Time of retention of increased resistance to hypoxia in relation to different patterns of high mountain acclimatization p0255 N73-22006
AYIVORH, S. C.
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields. p0053 A73-14289
AYOTTE, B.
Assessment of left heart function by noninvasive exercise test in normal subjects. p0277 A73-31345
AYOUB, M. M.
Optimal work-rest schedules under prolonged vibration. p0423 A73-43217
Work-rest schedules under prolonged vibration with implications to military operations p0271 N73-23986
Physiological response to prolonged muscular activity p0271 N73-23990
AYZIKOV, G. S.
Change in the impulse activity of neurons in the respiratory center during electric stimulation of the vestibular nerve and dorsal roots in the spinal cord p0442 N73-33017
AZAR, A.
Cardiovascular effects of fluorocarbon exposure [AD-751427] p0140 N73-16091
AZER, M. Z.
Effects of heat stress on performance. p0096 A73-18473
AZHAEV, A. M.
Changes in the gas content of blood in man during exposure to high ambient temperatures p0208 A73-27711
AZHAIEV, A. M.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning p0182 N73-19095
Change in blood content of gases when man is exposed to high ambient temperatures p0217 N73-20105
Human adaptation to hypoxia and tolerance of high environmental temperatures [NASA-TT-F-14860] p0219 N73-20122

B

BAB'EVA, I. P.
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity. p0396 A73-42164
BABMINDRA, V. P.
Structural plasticity of interneuron synapses p0389 A73-41280
BACHMAN, J. A.
A method for calculating aircrew radiation dose [AD-745084] p0593 N73-10079
BACHMANN, K.
A programmable four channel system for long-time radio telemetry of biomedical parameters. p0052 A73-14280
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart. p0053 A73-14291
BACK, K. C.
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses [AD-746302] p0610 N73-11082
Dichloromethane hepatotoxicity in mice with continuous and intermittent inhalation exposures [AD-751434] p0138 N73-16081
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys [AD-751232] p0140 N73-16092
Special aspects of aviation occupational medicine. Cardiovascular and nervous system effects of bromotrifluoromethane [AGARD-R-599] p0149 N73-17106
BACON, J.
Stereopsis without image segregation. p0046 A73-13762
BADDELEY, A. D.
Underwater work performance and work tolerance [AD-747701] p0072 N73-13107
BAE, H. C.
Responses of indigenous microorganisms to soil incubation as viewed by transmission electron microscopy of cell thin sections. p0241 A73-29724
BAEHR, E. F.
Ophthalmic liquefaction pump [NASA-CASE-LEW-12051-1] p0437 N73-32000
BARUEHLE, E.
The average information transmitted in the case of multidimensional stimuli involving tactile

information transmission
p0122 A73-20393

BAEV, I.
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat.
p0587 A73-12187

BAGBY, G. J.
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155

BAGOLINI, B.
An attempt to obtain an electroretinographic perimeter
p0308 A73-34963

BAGRASH, F. M.
Size-selective adaptation - Psychophysical evidence for size-tuning and the effects of stimulus contour and adapting flux.
p0128 A73-21563

BAGROVA, N. D.
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654

BAILEY, D.
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755

BAILEY, J. J.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797

BAILEY, J. V.
Thermoluminescent dosimetry for the Apollo 16 microbial response to space environment experiment (M191)
p0292 N73-24115

BAILEY, H. W.
Research in support of aviation medicine
[AD-749456] p0108 N73-15129
Aircrew color vision requirements
p0179 N73-19073

BAILY, N. A.
The calculation of proportional counter energy-deposition spectra from experimental data.
p0280 A73-31549
Electrofluoroplaniqraphy.
p0389 A73-41216

BAIRAMOV, KH. T.
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725

BAIRD, J. C.
Effects of resource constraints on ideal plans.
p0044 A73-13559

BAJPAI, P. K.
Bone strength and in-flight mechancial stresses
[AD-754982] p0221 N73-20134

BAKER, B. S.
Carbon dioxide adsorbent study
[NASA-CR-114661] p0420 N73-31013

BAKER, D. W.
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947

BAKER, E.
Prediction of long-term heat-pipe performance from accelerated life tests.
p0384 A73-40438

BAKER, M. A.
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092

BAKER, W. E.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936

BAKHTEYEVA, V. T.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019

BAKHTIGOZIN, V. A.
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912

BAKLAVADHZIAN, O. G.
Evoked potentials in the hypothalamus in response to stimulation of the vagus and sciatic nerves
p0349 A73-37941

BAKRADZE, O. S.
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331

BALAKHOVSKII, I. S.
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233

BALAKHOVSKIY, I. S.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019
Effect of hypodynamia and other spaceflight factors on the excretion of 17-hydroxycorticosteroids and aldosterone
p0373 N73-29031

BALANTER, B. I.
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002
A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003

BALASHEVICH, L. A.
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light
p0425 A73-43791

BALBUKOV, O. S.
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia
p0402 A73-42664

BALDRIGHT, G.
Responses of blind fish to gravitational changes as achieved in parabolic flight
p0226 N73-21101

BALE, R. M.
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft.
p0050 A73-14161
Comparative motion sickness symptomatology and performance decrements occassioned by hurricane penetrations in C-121, C-130, and P-3 Navy aircraft
[AD-743928] p0596 N73-10100

BALINTFY, J. L.
Modeling food preferences over time
[AD-749079] p0102 N73-14100

BALL, J. A.
The zoo hypothesis.
p0428 A73-44554

BALLDIN, U. I.
Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563

BALSKHOVSKIY, I. S.
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104

BALWANZ, M.
Telemetry of venous blood pressure at rest and at muscle activity during running.
p0053 A73-14290

BAMBENEK, R. A.
Evaluation of HO modules for the SSP ETC/LSS.
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Upgrading and extended testing of the MSC integrated water and waste management hardware
[NASA-CR-128878] p0222 N73-20102

BANCROFT, R. W.
Aeromedical evaluation of the phased-dilution concept for oxygen breathing systems
p0266 N73-23065

BANDARIN, V. A.
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174

BANERJEE, N. N.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
BANGEN, P.
Hematologic studies after rapid decompression
[DLR-FB-73-63] p0446 N73-33047
BANKAITIS, H.
ASRDI oxygen technology survey. Volume 2: Cleaning requirements, procedures, and verification techniques
[NASA-SP-3072] p0111 N73-15155
BANKS, H. T.
Mathematical modeling of the glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
BANNIKOVA, N. A.
Mechanisms of certain functional shifts during change in the blood of the content level of external pancreatic-gland secretion components
p0081 A73-16700
BARANOV, G. L.
Ergatic modeling
p0241 A73-29418
BARANOV, V. L.
Ergatic modeling
p0241 A73-29418
BARANOV, V. N.
Method for automatic processing of the indices of an operator's gas exchange during work in a trainer using a ""DNEPR'' electronic computer
p0444 N73-33035
BARANOVA, V. P.
Study of reactions of human otorhinolaryngological organs during hypokinesia
p0256 N73-22015
Analysis of some indices of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026
BARANSKI, S.
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
BARAZ, L. A.
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570
BARBARASH, N. A.
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
BARBARO, V.
An attempt to obtain an electroretinographic perimeter
p0308 A73-34963
BARBASHOVA, Z. I.
Evolutionary significance of carbohydrate metabolism alterations in animal brains during adaptation to hypoxia
p0575 A73-10153
Human adaptability
p0584 A73-11921
BARGETON, D.
Recording of second time derivative of displaced volume V in breathing.
p0159 A73-22937
Exchange of hand heat. The role of circulatory reactions and variations of the local temperature of arterial bloods
[NASA-TT-F-15143] p0445 N73-33043
BARKER, N. D.
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations.
p0310 A73-35460
BARKER, W. C.
Informational biopolymer structure in early living forms.
p0090 A73-17946
BARLETT, H. L.
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
BARNARD, E. A.
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
BARNARD, R. J.
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
BARNATSKII, V. N.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
BARNATSKIY, V. N.
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057
BARNEBEY, A.
An earphone coupling system for acute physiological studies.
p0581 A73-10829
BARNES, C. M.
Applications of remote sensing in public health.
p0363 A73-39866
BARNES, G. R.
A theoretical model of the utricular otolith and its response to angular motion with respect to an acceleration in shear
[PPRC-1315] p0608 N73-11070
BARNES, L. B.
Today's challenge - Optimizing the air traffic controller's role.
p0353 A73-38472
BARNES, R. M.
Physical energy expenditure in long-haul cabin crew.
p0326 A73-36793
BAROLDI, G.
Significance of arterial obstructive lesions in early diagnosis of coronary heart disease.
p0405 A73-42829
BARON, M. L.
Transfer assessment using a between-subjects central-composite design.
p0430 A73-44774
BARON, S.
Analytic evaluation of display requirements for approach to landing
p0599 N73-10121
Prediction and analysis of human performance in a VTOL hover task
p0601 N73-10134
BARON, W. S.
Visual acuity as a function of exposure duration.
p0165 A73-23838
BARR, R.
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032] p0136 N73-16065
Spectra of normal and nutrient-deficient maize leaves
[NASA-CR-132145] p0293 N73-24119
BARR, R. C.
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts and their detection on the body surface.
p0319 A73-36518
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
BARR, R. E.
Chronic oxygen electrodes: A feasibility study
[AD-748422] p0074 N73-13120
BARRENSCHEEN, H. K.
In regard to bacterial reduction of organically bound phosphoric acid
[NASA-TT-F-14723] p0069 N73-13080
BARRETT, R. F.
Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514
BARROSO, F.
Stereopsis without image segregation.
p0046 A73-13762
BARRY, W.
Dynamics of the Semicircular canals compared in yaw, pitch and roll
p0109 N73-15137
Influence of eye lid movement upon electro-oculographic recording of vertical eye movements
p0110 N73-15143

BARSKII, I. IA.
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135

BARTHOLOMAE, K. P.
The Biostack experiment on Apollo 16.
p0399 A73-42185

BARTLETT, D., JR.
Control of the duration of expiration.
p0391 A73-41635

BARTLETT, H. G., JR.
Breathing metabolic simulator
p0075 N73-13850

Respiratory system
p0105 N73-15102

BARTLEY, J. C.
Hepatic lipogenesis in fasted, re-fed rats and mice - Response to dietary fats of differing fatty acid composition.
p0041 A73-13054

BARTYZEL', A. I.
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325

BARYSHNIKOV, S. D.
Use of a skin analysor as a communication channel in controlling activity (review of the literature)
p0069 N73-13074

BARZINJI, J.
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844

BARZNIJI, J.
A deterministic model of a human performing compensatory tracking
[AD-746725]
p0072 N73-13101

BASIN, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

BASON, R.
Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062

BASSANT, M. H.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540

BASSANT, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

BASSINGTHWAIGHTE, J. B.
Calcium movements and excitation-contraction coupling in cardiac cells.
p0198 A73-25601

BASTIEN, MR.
Current aspects of the cochlear function in members of flight crews
p0330 A73-36940

BATEMAN, S. C.
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509

BATES , D. V.
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001

BATES, B. H.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767

BATES, B. L.
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027

BATY, D. L.
Human transinformation rates during one-to-four axis tracking with a concurrent audio task
p0602 N73-10139

BAUER, J.
Loudness enhancement following contralateral stimulation.
p0581 A73-10827

BAUER, M. E.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055]
p0136 N73-16064

BAUMAN, A. J.
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples.
p0202 A73-26481

BAUMANN, H.
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755

Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis
p0348 A73-37756

Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140

BAUMANN, I.
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306

BAUMGARDNER, M. F.
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032]
p0136 N73-16065

Spectra of normal and nutrient-deficient maize leaves
[NASA-CR-132145]
p0293 N73-24119

BAUR, P. S.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482

BAYEVSKIY, R. M.
Investigative methods in space biology and medicine: Transmission of medical data
[NASA-TT-F-14996]
p0338 N73-27057

BAZANOVA, M. I.
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661

BAZAREVICH, G. IA.
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645

BAZHANOV, V. V.
Ways of enhancing the efficiency of physical exercise
p0280 A73-31515

Ways to increase effectiveness of physical training
p0263 N73-23039

BAZHENOV, IU. I.
Effect of adaptation to cold on the energy characteristics of muscular activity
p0235 A73-28295

BAZILIUK, O. V.
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365

BEAKLEY, J. H.
Study of methods for the improvement of bacterial transport media
[NASA-CR-128958]
p0297 N73-25113

BEARD, E. F.
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336

An exercise prescription intervention program with periodic ergometric grading
p0145 N73-17067

BEASON, R. C.
Waterfowl migration corridors
[AD-748114]
p0073 N73-13109

BEATTY, H. T.
Diver anthropometrics
[AD-748627]
p0114 N73-15175

BEAUJEAN, R.
The Biostack experiment on Apollo 16.
p0399 A73-42185

BEAUMONT, J. G.
On the nature of the interhemispheric effects of fatigue.
p0157 A73-22925

BEAVEN, G. L.
On-line computer analysis and breath-by-breath graphical display of exercise function tests. p0127 A73-21511
Anaerobic threshold and respiratory gas exchange during exercise. p0360 A73-39785

BECK, A.
Radiological assessment of the vertebral column from the point of view of aviation medicine p0409 A73-43131

BECKER-CARUS, C.
Does the perception threshold change the dominance between vision and touch p0425 A73-43847

BECKER, H. A.
Behavioral stress response RE - Passenger briefings and emergency warning systems on commercial airlines. p0329 A73-36922

BECKER, W.
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark. p0245 A73-30390
The control of eye movements in the saccadic system. p0317 A73-36453

BECKER-HODMANSTETTEN, H. A.
In regard to bacterial reduction of organically bound phosphoric acid [NASA-TT-F-14723] p0069 N73-13080

BECKMAN, D. L.
Hyperbaric oxygen and alveolar surfactants. [AD-759298] p0238 A73-28507

BECKMAN, F. H.
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation. p0314 A73-36125

BECKMANN, C. E.
Pneumatic prosthesis control [NASA-TT-F-14628] p0073 N73-13115

BEDELL, R. B.
Deficits in visual function associated with laser irradiation. p0169 A73-24563
Spectral deficits in visual acuity due to laser irradiation [AD-750394] p0114 N73-15173

BEDENKO, V. P.
Utilization of solar energy for photosynthesis by spring wheat cultivated in mountains p0378 N73-29335

BEDYNEK, J. L.
Sinus venosus atrial septal defect - Analysis of fifty cases. p0121 A73-20368

BEGLEITER, H.
Evoked potential correlates of expected stimulus intensity. p0125 A73-21225

BEHAR, I.
A versatile, inexpensive generator of periodic visual stimuli [AD-754562] p0223 N73-20149

BEHLING, K.
Thermoregulatory behavior of man during rest and exercise. p0162 A73-23572
Input and output in the system of thermoregulation during rest and exercise [NASA-TT-F-14562] p0593 N73-10074

BEHN, C.
Renin-angiotensin system in simulated hypervolemia induced by immersion [NASA-TT-F-14885] p0258 N73-22036

BEHREND, A. F., JR.
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle. [ASME PAPER 73-ENAS-42] p0351 A73-37989

BEHRMAN, J.
A clinical method for obtaining pattern visual evoked responses. p0236 A73-28357

BEISCHER, D. E.
The null magnetic field as reference for the study of geomagnetic directional effects in animals and man. p0092 A73-18033

BEKAURI, N. V.
Technique for measuring the vessel blood pressure in long continued experiments p0279 A73-31394
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation p0402 A73-42661

BEKH, K. I.
Effect of copper ions on the functional state of the neuromuscular apparatus p0154 A73-22369

BELASCO, N.
Medical subject monitoring systems [NASA-CASE-MSC-14180-1] p0259 N73-22045

BELAY, V. Y.
Joint effect of stimulators and tranquilizers on performance of a man-operator p0256 N73-22021
Problems of space biology. Volume 17: Pathophysiological bases of aviation and space pharmacology [NASA-TT-F-736] p0257 N73-22033

BELEDA, R. V.
Analysis of some mechanisms of human stability to decompression of the lower portion of the body p0124 A73-20987
Analysis of some mechanisms of man's tolerance to lower body decompression p0135 N73-16054
Effect of physical training and electric stimulation on metabolism p0256 N73-22019

BELENKIE, I.
Assessment of left ventricular dimensions and function by echocardiography. p0289 A73-34038

BELENKOV, N. IU.
The engram as an equivalent of triggering afference p0194 A73-25199

BELETSKII, E. N.
Informative parameters of the psychophysiological state of flight personnel when working with indicators p0305 A73-34237

BELETSKIY, N. Y.
Informative parameters of the psychophysiological state of flight personnel when working with an indicator p0373 N73-29035

BELIAEV, N. P.
Study of erroneous actions of flying personnel p0094 A73-18258

BELIAKOV, R. V.
Periodic conditions in artificial-muscle autopulsators p0244 A73-30289

BELIK, IA. IA.
Visual perception models p0060 A73-15785
Modeling of the process for conversion of angular magnitudes into visual magnitudes p0061 A73-15796

BELIKOVA, E. V.
DNA catabolism in rat tissues in response to transverse accelerations p0087 A73-17679

BELIKOVA, Y. V.
DNA catabolism in the organs of rats under the influence of transversely directed accelerations p0063 N73-12080
Action of a set of extremal factors on ribonuclease p0185 N73-19120

BELITS'KA, G. O.
Fibrinolytic activity of urine in healthy persons p0276 A73-31165

BELJAN, J. R.
Osseous malrepair in calcium-deficient states. p0313 A73-35981

BELKANIIA, G. S.
Renal component of the antigravitation function of the organism p0123 A73-20976

BELKANIYA, G. S.
Renal component of the antigravitational function in the body p0133 N73-16043

BELKIN, V. I.
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats p0086 A73-17676

Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide p0280 A73-31519
Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions p0063 N73-12077
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats p0254 N73-22004
Effect of preliminary exposure to carbon monoxide on development of hypokinetic disorders in white rats p0255 N73-22007
Effect of restriction of motor activity of animals on their tolerance to an acute exposure to carbon monoxide p0264 N73-23043
Influence exerted on the animal body by continuous and discontinuous exposure to carbon monoxide p0442 N73-33019

BELL, H. H.
Sufficient conditions for the discrimination of motion. p0388 A73-41181

BELLANGER, DR.
Retinal arterial pressure - Orthostatic hypotension and fatigue /Preliminary study/ p0586 A73-12156

BELLANGER, G.
Renal lithiasis among civil operating aircrew p0127 A73-21536

BELLET, S.
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography. p0583 A73-11509

BELLEVILLE, R. E.
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights. p0582 A73-11209

BELLHOUSE, B. J.
Flow in branching vessels. p0408 A73-43103

BELOUSOVA, O. I.
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress p0117 A73-19644

BELOV, A. A.
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems p0336 N73-26090

BELOVA, V. S.
The molecular organization of the active center of microsomal cytochrome P-450 [NASA-TT-F-15042] p0374 N73-29042

BELYAKOVA, E. I.
Use of products of biological mineralization for cultivation of higher and lower autotrophs p0184 N73-19109

BELYANIN, V. I.
Determination of the light status in suspensions of algae p0378 N73-29325

BELYANIN, V. N.
The theory of photosynthesis of algae p0378 N73-29326

BELYASHIN, S. N.
Organization of the experiments and overall condition of the subjects p0255 N73-22011

BELYAYEV, V. V.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain p0257 N73-22029

BELZ, G. G.
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm. p0199 A73-25699

BENILLER, C. R.
Long-term observations in patients with angina and normal coronary arteriograms. p0097 A73-18871

BENADE, A. J. S.
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise. p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise. p0391 A73-41622

BENAIM, R.
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man. p0390 A73-41564

BENCHIMOL, A.
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter. p0159 A73-23173
Vectorcardiography. p0306 A73-34452

BENDER, B. G.
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis. p0585 A73-12077

BENGSON, M. H.
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet. p0355 A73-39103

BENIGNUS, V. A.
Statistical evaluation of time series analysis techniques [NASA-CR-134011] p0417 N73-30995

BENITA, H.
Intranuclear organization of the center median nucleus of the thalamus. p0240 A73-29175

BENNETT, B.
Active plant growth at freezing temperatures. p0203 A73-26486

BENNETT, G.
Pilot incapacitation. p0582 A73-11238

BENNETT, P. B.
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet. p0195 A73-25327

BENOR, D.
Acclimatization to severe dry heat by brief exposures to humid heat. p0045 A73-13700
A comparison of three methods of acclimatization to dry heat. p0158 A73-22932
Heat acclimatization while wearing vapor-barrier clothing. p0307 A73-34742

BENOVA, D.
Radiation protective effect of a mixture of ATP, AET, and serotonin on yields of 600-R X-ray-induced chromosome aberrations in the rat. p0587 A73-12187

BENSON, A. J.
Spatial disorientation and the 'break-off' phenomenon. p0356 A73-39111
Response of semicircular canal dependent units in vestibular nuclei to rotation of a linear acceleration vector without angular acceleration [AMRU-R-70-4] p0607 N73-11061

BENSON, R. E.
Visual light flash phenomenon, part C p0233 N73-21763

BENTON, E. V.
High Z particle cosmic-ray exposure of Apollo 8-14 astronauts [AD-745188] p0596 N73-10101
The high energy multicharged particle exposure of the microbial ecology evaluation device on board the Apollo 16 spacecraft p0292 N73-24114

BERBICHASHVILI, K. G.
Modification of a ballisto-oscillograph for extremities p0157 A73-22865

BEREGOVKIN, A. V.
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights

p0208 A73-27710
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104

BERENSON, P. J.
Temperature
p0104 N73-15094

BERESNEV, G. P.
The theory of photosynthesis of algae
p0378 N73-29326

BERFASCONI, C.
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol.
p0429 A73-44689

BERGE, W. A.
Degradation of learned skills. Effectiveness of practice methods on simulated space flight skill retention
[NASA-CR-128612] p0603 N73-10153
Degradation of learned skills: Effectiveness of practice methods on visual approach and landing skill retention
[NASA-CR-128912] p0269 N73-23086

BERGER, W. K.
Correlation between the ultrastructure and function of intercellular contacts.
p0197 A73-25590

BERGERON, H. P.
Ride quality research activities at NASA Langley Research Center
p0591 N73-10024

BERGEY, K. H.
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157

BERGH, U.
Body temperatures during negative work exercise.
p0048 A73-14112

BERGHAGE, T. E.
Diver anthropometrics
[AD-748627] p0114 N73-15175
Influence of increased ambient pressure and gas density on cardiac rate in man
[AD-755129] p0261 N73-22058

BERGIN, J. H.
Aircraft as an instrument of self-destruction.
p0307 A73-34706

BERGIN, K. G.
The effects of fatigue on health and flight safety.
p0303 A73-34080

BERGSTROEM, B.
Morphological studies of the vestibular nerve
[NASA-CR-135746] p0445 N73-33042

BERGSTROM, B.
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213

BERGTHOLDT, C. P.
Environmental health program activities
p0143 N73-17057

BERIDZE, K. P.
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856

BERKMAN, H.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505

BERNAL, H.
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788

BERNAUER, E. M.
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524

BERNHARD, C. G.
Optical properties of the compound eye.
p0161 A73-23310

BERRY, C. A.
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Effects of weightlessness in man.
p0398 A73-42176
Weightlessness
p0105 N73-15099

BERSHTEIN, S. A.
Changes in hemodynamics and efferent sympathetic pulsation during pressor cardiovascular reflexes under conditions of acute hypoxic hypoxia
p0154 A73-22365
Effect of respiration stabilization on hemodynamic reactions during acute hypoxic hypoxia
p0166 A73-23938
Hemodynamics alteration caused by acute hypoxia in animals with denervated carotid sinuses
p0236 A73-28350

BERT, J.
Similarities and differences concerning the sleep of two baboons, Papio hamadryas and Papio papio
p0359 A73-39764

BERTOLACCI, G.
New method of stimulation for the study of photoreceptors.
p0237 A73-28362

BERTRAND, J. J.
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911

BESCH, E. L.
Organ and body mass changes in restrained and fasted domestic fowl.
p0057 A73-14975

BESCHLE, R. G.
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522

BESPALOVA, L. A.
Morphological and electron-microscopic alterations of the myocardium in dogs subjected to lasting chronic gamma irradiation
p0305 A73-34230
Morphological and electron microscope changes in the cardiac muscle of dogs exposed to chronic gamma irradiation
p0372 N73-29027

BESSETTE, R. J.
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012

BETHEA, N.
Physiological response to prolonged muscular activity
p0271 N73-23990

BETHELL, H. J. N.
P wave of electrocardiogram in early ischaemic heart disease.
p0048 A73-13892
Understanding the atrial sound.
p0199 A73-25696

BEVERLEY, K. I.
Disparity detectors in human depth perception - Evidence for directional selectivity.
p0383 A73-40413

BEYER, R.
Effectiveness studies regarding cockpit displays
[DGLR PAPER 72-097] p0584 A73-11666
Assessment of cockpit displays
[DGLR-PAPER-72-97] p0074 N73-13118

BEYERLE, F. J.
Microbiological surveillance of food handling at NASA-MSFC
[NASA-TM-X-64734] p0220 N73-20127
Microbiological assay of the Marshall Space Flight Center neutral buoyancy simulator
[NASA-TM-X-64736] p0229 N73-21127
Biodetection grinder
[NASA-TM-X-64765] p0376 N73-29059

BEZDENEZHNYKH, B. N.
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105

BEZHENARU, I. S.
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576

BEZUHOVA, I. Y.
Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028

BHAN, A. K.
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157

BHARDWAJ, S. K.
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333

BIANKI, V. L.
Transcommisural interaction of monocular systems
p0167 A73-24332

BIASCO, G.
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697

BIASINI, G. C.
Advantages offered by the use of fructose as monosaccharide added to saline solutions used in the oral rehydration of individuals suffering from gastroenteritis
[NASA-TT-F-14596] p0609 N73-11078

BIDZILIA, IU. P.
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161

A simplified method of calculating thermodilution curves
p0276 A73-31168

BIERN, R. O.
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541

BIERTHER, M.
Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation
p0047 A73-13824

BIGNALL, K. E.
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600

Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601

BIGU DEL BLANCO, J.
Radiofrequency fields - A new ecological factor.
p0392 A73-41787

BILL, J. C.
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent.
p0085 A73-17199

BILLINGHAM, J.
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] p0334 N73-26071

BILLINGS, C. E.
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501

Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft.
p0386 A73-41154

Stress and strain in student helicopter pilots.
p0386 A73-41155

Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062

Barometric pressure
p0104 N73-15092

Atmosphere
p0104 N73-15093

Ethyl alcohol and pilot performance: Military implications of in-flight studies
p0227 N73-21113

BILLINGS, M. P.
The Computerized Anatomical Man (CAM) model
[NASA-CR-134043] p0440 N73-32022

BILYCH, K. M.
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283

BING, O. H. L.
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097

BING, R. J.
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446

BIORCK, G.
Early diagnosis of coronary heart disease - What is it good for.
p0404 A73-42828

BIRBAUMER, N.
A device for the continuous measurement of subjective changes
p0285 A73-33090

BIRCH, J.
Dichromatic convergence points obtained by subtractive colour matching.
p0346 A73-37420

BIRD, J. F.
Analysis of transient visual sensations above the flicker fusion frequency.
p0129 A73-21566

BIRD, T. J.
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482

BIRNBAUM, H. L.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499

Time course of respiratory adaptation to high altitude
[AD-755192] p0267 N73-23075

BIRYUKOV, Y. I.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019

BIRYUKOV, Y. N.
Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028

BISHEA, J.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846

BISGARD, G. E.
Ventilatory control in the Hereford calf.
p0360 A73-39782

BISHOP, A. O., JR.
Digital filters applicable to electroencephalographic pattern recognition.
p0582 A73-11464

BISHOP, P. O.
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421

BISTENI, A.
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834

BIUTNER, S. I.
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734

BIXLER, H. A.
IR laser radiation eye protector
[AD-753080] p0178 N73-18142

BIZIN, IU. P.
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931

BIZZI, E.
Adjustment of saccade characteristics during head movements.
p0201 A73-26222

Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432

Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452

BJERKER, K.
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772

BJORK, L.
The value of different angiographic procedures in coronary heart disease. p0405 A73-42831
BJURSTEDT, H.
Gravitational stress and exercise. p0313 A73-35980
BLACK-CLEMONTH, P.
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits. p0054 A73-14299
BLACK, H. S.
An experimental basis for carcinogenic effects of ultraviolet radiation. p0203 A73-26485
BLACKABY, J. E.
A study of the thermoregulatory characteristics of a liquid-cooled garment with automatic temperature control based on sweat rate: Experimental investigation and biothermal man-model development
[NASA-TN-D-7311] p0299 N73-25126
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] p0334 N73-26071
BLACKBURN, L. H.
Disorienting effects of aircraft catapult launchings. p0117 A73-19480
BLACKWELL, H. R.
A human factors approach to lighting recommendations and standards. p0083 A73-16730
BLAGODATOVA, E. T.
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli p0156 A73-22579
BLAIR, S. M.
Accommodation of the eye during sleep and anesthesia. p0245 A73-30391
Concerning the supranuclear organization of eye movements. p0316 A73-36435
BLAISE, H. T.
Free flying teleoperator p0261 N73-22925
BLAKE, M. J. F.
Temperament and time of day. p0286 A73-33157
BLAKE, R.
The psychophysical inquiry into binocular summation. p0388 A73-41187
BLAKEMORE, C.
Stimulus specificity in the human visual system. p0407 A73-42960
BLANC, P.
Current aspects of the cochlear function in members of flight crews p0330 A73-36940
BLEICHERT, A.
Thermoregulatory behavior of man during rest and exercise. p0162 A73-23572
Input and output in the system of thermoregulation during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074
BLINOV, N. G.
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load p0249 A73-30841
BLISS, J. C.
A computer assisted teleoperator control station with tactile feedback p0602 N73-10143
BLIUMENFEL'D, L. A.
Theoretical study of primary photosynthesis processes in higher plants and algae p0425 A73-43707
BLOCKLEY, E. V.
Postponement of incipient collapse due to work-induced heat stress by limited cooling
[NASA-CR-134059] p0438 N73-32005
BLOKHIN, I. P.
Asana and breathing p0322 A73-36573
Synchronism and heterochronism of synkinesis in man p0336 N73-26089
BLOOM, F. E.
The development of synapses in the rat cerebellar cortex. p0051 A73-14256
BLOOM, K.
Deficits in visual function associated with laser irradiation. p0169 A73-24563
Spectral deficits in visual acuity due to laser irradiation
[AD-750394] p0114 N73-15173
BLOOMFIELD, J. R.
Peripheral acuity with complex stimuli at two viewing distances p0191 N73-19965
BLOOMFIELD, S. S.
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units. p0209 A73-27891
BLOOR, C. M.
Hereditary aspects of coronary atherosclerosis. p0320 A73-36532
BLOUNT, S. G., JR.
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man. p0122 A73-20369
BLUHE, F. D.
The diluter-demand oxygen system used during the international Himalayan expedition to Mount Everest. p0194 A73-25145
BLUMENFELD, W.
Heated Fleisch pneumotachometer - A calibration procedure. p0127 A73-21509
BLUMENSTEIN, B.
A mathematical model to assess changes in the baroreceptor reflex. p0126 A73-21475
BLUMENTHAL, M. S.
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality. p0097 A73-18870
BLUMENTHAL, S.
Prevention of atherosclerosis. p0243 A73-30065
BOBBITT, T. F.
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125
BOBKO, K. J.
Skylab medical experiments altitude test crew observations.
[ASME PAPER 73-ENAS-30] p0351 A73-37985
BOBRISHCHEV-PUSHKIN, D. M.
Health evaluation of electron beam welding of beryllium bronze p0190 N73-19531
BODANOWITZ, M.
Change in circadian rhythm of psychomotor performance after transmeridian flights
[DLR-FB-73-52] p0421 N73-31022
BODO, D.
Analysis of some indices of electronystagmograms for healthy persons in labyrinthal calorization tests p0443 N73-33026
BODROV, V.
Study of some psychic functions of aquanauts during prolonged exposure to increased pressure p0068 N73-13073
The work and rest regime of cosmonauts
[NASA-TT-F-14990] p0336 N73-26093
Work and rest schedule for cosmonauts p0416 N73-30984
BODROV, V. A.
Experimental study of emotional stress in operators p0193 A73-25038
BOETTGER, H. G.
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples. p0202 A73-26481
BOEX, M. M.
Regenerative particulate filter development
[NASA-CR-115505] p0268 N73-23084
BOGACH, P. G.
High-frequency synchronized activity of the

amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973
BOGATS'KII, O. V.
State and prospects of scientific work in the chemistry of psychotropic preparations
p0207 A73-27497
BOGATYREVA, S. A.
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
BOGDANOV, N. A.
Poisoning by hydrazine derivatives
p0165 A73-23819
BOGDANOVA, N. A.
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
BOGDANSKI, K. A.
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method.
p0054 A73-14304
BOGOMOLOV, V. I.
Soviet cybernetics review (selected articles) [AD-751145]
p0178 N73-18143
BOGOMOLOVA, Y. N.
On various types of corticopetal influences from deep-seated emotiogenic formations of the brain
p0449 N73-33068
BOGORAD, S. KH.
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
BOGOSLOVOV, G. B.
Pathogenesis of some respiration and circulation reactions to barometric pressure gradients
p0123 A73-20980
Pathogenesis of some respiratory and circulatory reactions accompanying drops in barometric pressure
p0134 N73-16047
BOGOSLOVSKII, N. N.
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
Application of factor analysis to the encephalographic characterization of sleep
p0430 A73-44722
BOGREN, H.
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345
BOHN, H.
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546
BOISSIN, DR.
Retinal arterial pressure - Orthostatic hypotension and fatique /Preliminary study/
p0586 A73-12156
BOISSIN, J. P.
Developments as regards maximum visual acuity with age among cockpit crew members.
p0387 A73-41164
BOJSEN, J.
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
BOLOTASHVILI, Z. A.
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
BONAVENTURE, M.
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Model of evaporation responses to heat load increases
p0352 A73-38150
BONDAR', A. T.
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251
BONDARENKO, M. P.
Axiomatic formulation of a mathematical model for visual adaptation
p0579 A73-10655
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Mathematical description of some visual inertia effects
p0060 A73-15786
BONDAREV, E. V.
Work of the Aerospace Section of the Leningrad Society of Physiologists, Biochemists and Pharmacologists Imeni I. M. Sechnov
p0445 N73-33037
BONDE-PETERSEN, F.
Effect of training with eccentric muscle contractions on skeletal muscle metabolites.
p0390 A73-41523
BONFITTO, M.
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
BONNER, A. J., JR.
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
BONNET, C.
Temporal factors of movements in visual aftereffects
p0308 A73-34843
BONNEY, C. H.
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
BOOK, W. J.
Study of design and control of remote manipulators. Part 2: Vibration considerations in manipulator design [NASA-CR-124189]
p0221 N73-20138
BOONAYATHAP, U.
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
BOOTH, F. W.
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624
BOR-RAMENSKIY, A. Y.
Some construction principles for remote control imitative manipulators [NASA-TT-F-14889]
p0232 N73-21152
BORBELY, A. A.
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306
BORDA, R. P.
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
BORG, E.
The dynamic properties of the acoustic middle ear reflex in nonanesthetized rabbits - Quantitative aspects of a polysynaptic reflex system.
p0078 A73-16249
BORISKINA, G. M.
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
BORJESSON, E.
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091
BORLAND, R. C.
Use of hypnotics by aircrew: Adaptive tracking as a technique for the evaluation of performance decrements related to the flying task

p0227 N73-21109
BORNSTEIN, M. H.
Photopic luminosity measured by the method of critical frequency.
[AD-754344] p0585 A73-12076
BORODIUK, N. A.
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
BORODKIN, P. A.
The effect of temperature on the mitotic activity of human peripheral blood lymphocytes in a culture
p0118 A73-19649
BORODULINA, I. I.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113
BOROVIAGIN, V. L.
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717
BOROVIKOV, IU. S.
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
BORREDON, P.
Importance of the Lohmann reaction in the response of the heart to anoxic aggression
p0585 A73-12152
BORRESEN, C. R.
Autokinetic movement as a function of the implied movement of target shape.
p0117 A73-19549
BORSHCHENKO, V. V.
Study of a method of conservation of urine relative to spaceflight conditions
p0184 N73-19112
Peculiarities of human skin reactions to lotions of different composition during hypokinesia
p0444 N73-33034
BORSKY, P. N.
A new field-laboratory methodology for assessing human response to noise
[NASA-CR-2221] p0176 N73-18124
BORUKAYEVA, M. H.
The molecular organization of the active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042
BOSI, C.
An attempt to obtain an electroretinographic perimeter
p0308 A73-34963
BOSTROEM, A.
The effect of ignition of small quantities of initiators in laboratory vessels of glass and polythene
[ERDE-TRANS-1] p0295 N73-24137
BOTER, J.
Ways to avoid noise and artefacts when using telemetry.
p0054 A73-14295
BOTSCHAROWA, L.
A method for calculating the sedimentation characteristics of particles in linear dextrane-density gradients and its application to the separation of red blood cells according to the sedimentation rate
p0237 A73-28476
BOULANT, J. A.
Determinants of hypothalamic neuronal thermosensitivity in ground squirrels and rats.
p0358 A73-39600
Changes in thermosensitive characteristics of hypothalamic units over time.
p0358 A73-39601
BOURDAHIAS, J. P.
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788
BOURDY, C.
Study of variations of retinal disparities around the fixation point by the binocular vernier method in the foveal region
p0046 A73-13763
BOURLAND, C. T.
Microbiological testing of Skylab foods.
p0205 A73-27075
Skylab food test and integration
[NASA-CR-128910] p0268 N73-23080
BOURLAND, J. D.
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
BOURNE, G. H.
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
The pathology of innactivation in monkeys.
p0314 A73-35983
Breeding monkeys for biomedical research
p0266 N73-23063
BOURNE, J. R.
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
BOUTELIER, C.
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Tolerance to immersion in cold water
p0331 A73-36943
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
BOUVEROT, P.
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220
BOYE, A. A.
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782
BOWEN, J. D.
Background and development of Boyle's Law altitude suits
[AD-761797] p0369 N73-27970
BOWERS, M.
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787
BOWERS, R. W.
Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660
BOWERS, W. D.
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
BOYCKS, E. C.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
BOYD, A. E., III
Thyroid responses to simulated altitude.
p0157 A73-22926
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
BOYD, D. D.
Dichloromethane hepatotoxicity in mice with continuous and intermittent inhalation exposures
[AD-751434] p0138 N73-16081
BOYD, E.
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
BOYER, J. L.
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
BOYKIN, E. H.
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828

Automatic surface inoculation of agar trays.
p0155 A73-22550
BOYKO, G.
Soviet cybernetics review (selected articles)
[AD-751145] p0178 N73-18143
BOYKO, N. N.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113
BOYLE, J., III
Theoretical trans-respiratory pressure during rapid decompression. I Model experiment. II - Animal experiments.
p0154 A73-22530
BOYLEN, C. W.
Survival of Arthrobacter crystallopoietes during prolonged periods of extreme desiccation.
p0119 A73-20026
BOYNTON, C. D.
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
BRABANT, G.
A hybrid computer program for the visual display of compensatory system model parameters
p0598 N73-10109
BRACHFELD, N.
Factors related to maintenance of cell viability.
p0321 A73-36545
BRADDICK, O.
The masking of apparent motion in random-dot patterns.
p0120 A73-20256
BRADLEY, P. D.
Bibliography of scientific publications and presentations relating to planetary quarantine: 1966 - 1971
[NASA-CR-131889] p0258 N73-22038
Scientific publications and presentations relating to planetary quarantine. Volume 5: The 1972 supplement
[NASA-CR-131817] p0297 N73-25112
BRADLEY, J. L.
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672
BRADY, J. C.
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983
BRADY, J. F.
Study of physiological and behavioral response to transitions between rotating and nonrotating environments
[NASA-CR-2130] p0611 N73-11093
BRAEUER, D.
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034
BRAGINSKII, L. P.
Application of the oxygen method in algotoxic investigations
[DRIC-TRANS-2991] p0187 N73-19139
BRAHLEK, H. E.
Development of a standardized battery of performance tests for the assessment of noise stress effects
[NASA-CR-2149] p0148 N73-17102
BRAHMACHARI, H. D.
Cobalt compounds for the control of hypoxic stress.
p0307 A73-34744
BRAITHWAITE, W. R.
The calculation of minimum safe inspired gas temperature limits for deep diving
[AD-748197] p0103 N73-14104
BRANDENBERGER, G.
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
The effects of muscular exercise on urinary excretions of adrenal hormones in the normal man
[NASA-TT-F-15046] p0374 N73-29043
BRANDON, C. A.
Hyperfiltration technique applied to wash water reclamation at elevated temperatures.
[ASME PAPER 73-ENAS-27] p0350 A73-37982
BRANDT, T.
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Visual-vestibular interaction and motion perception.
p0318 A73-36460
BRANDT, TH.
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
BRATTSTROEM, A.
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648
BRATUS', V. V.
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses
p0322 A73-36578
BRAUER, R. W.
Studies concerning the high pressure hyperexcitability in the squirrel monkey
[AD-745779] p0610 N73-11086
BRAUN, R. G.
Human factors evaluation of laser protective visors
[AD-751470] p0142 N73-16102
BRAUNWALD, E.
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
BREAZEALE, D.
An ultrasonic displacement instrument with greater beam dispersal.
p0408 A73-43109
BRECH, R.
Flow in branching vessels.
p0408 A73-43103
BREITMEYER, B. G.
A relationship between the detection of size, rate, orientation and direction in the human visual system.
p0046 A73-13758
BREIVIK, H.
Pre- and postoperative fluid therapy
[NASA-TT-F-14600] p0592 N73-10071
BRENES, C. P.
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200
BRENGELMANN, G. L.
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657
BRENNAN, D. E.
Colour vision requirements in different operational roles
p0179 N73-19072
Colour vision requirements in different operational roles in the Royal Air Force
[FPRC/1319] p0366 N73-27942
BRESLAV, I. S.
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Conditions of ascertaining and conditioning man's capacity to distinguish the composition of a breathing atmosphere
p0182 N73-19090

BRESNAHAN, D. L.
Wind tunnel investigation of the effect of high relative velocities on the structural integrity of birds
[NASA-TM-X-68163] p0106 N73-15114
BRESTKINA, L. N.
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
BREWER, R. L.
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482
BRIANOV, I. I.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
BRICTEUX-GREGOIRE, S.
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947
BRIDGEMAN, B.
Visual receptive fields sensitive to absolute and relative motion during tracking.
p0057 A73-15072
BRIEGLEB, W.
Histological studies on the vestibular organ of frog embryos and larvae after the influence of simulated weightlessness.
p0313 A73-35979
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Wing anomalies of the flour beetle tribolium confusum caused by G-G simulation
p0367 N73-27952
Elementary physics and application of G-G simulation according to H. J. Muller
p0368 N73-27961
BRIESE, H.-H.
Severe intraabdominal injuries without abdominal protective rigidity after an air crash - Seat belt injury
p0356 A73-39209
BRIGGS, G. E.
Multi-task time-sharing requirements
[AD-755363] p0269 N73-23088
BRIGHTON, J. A.
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428
BRILLING, G.
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157
BRINDICCI, G.
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697
BRITTEN, R.
Possible stimulus hypothesis and visual space perception.
p0202 A73-26321
BRITVAN, IA. N.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
BROADHURST, J. L.
GPSS/360 computer models to simulate aircraft passenger emergency evacuation
[FAA-AM-72-30] p0150 N73-17119
BROCKHOETTER, G.
Changes of cell enzymes, glucose, cholesterol and 17-hydroxycorticosteroids in blood during physical exercise as a function of the physical training status
[NASA-TT-F-14826] p0216 N73-20093
Behavior of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroids in blood during physical exercise and as a function of training condition
[DLR-FB-72-48] p0412 N73-30072
BRODERSON, A. B.
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
BRODY, D. A.
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
BRODZINSKI, H. L.
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-130538] p0150 N73-17114
The measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-131984] p0267 N73-23070
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-133378] p0365 N73-27939
BROEKHUYSE, R. H.
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs.
p0392 A73-41729
BROELL, J. E.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172
BROERSE, J.
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Tilt discrimination and aftereffect with stroboscopic display of contours.
p0096 A73-18624
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
BROGAN, F. A.
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339
BRONSHTEYN, A. A.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
BROOKS, R.
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.
p0247 A73-30517
BROOKS, R. M.
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097
BROWN, D. R.
Human receptive field characteristics - Probe analysis of stabilized images.
p0120 A73-20252
BROWN, H. H.
Reaction tester
[NASA-CASE-MSC-13604-1] p0073 N73-13114
BROWN, J. W.
Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] p0222 N73-20141
BROWN, K. T.
The time courses of late receptor potentials from monkey cones and rods.
p0046 A73-13761
Photopic suppression of monkey's rod receptor potential, apparently by a cone-initiated lateral inhibition.
p0345 A73-37412
Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation.
p0346 A73-37413
BROWN, L. H.
A study of the agroclimatology of the highlands of eastern Africa
[WMO-339] p0446 N73-33045
BROWN, N. E.
Application of EVA guidelines and design criteria. Volume 1: EVA selection/systems design considerations

[NASA-CR-128926] p0268 N73-23081
Application of EVA guidelines and design criteria. Volume 2: EVA workstation conceptual designs
[NASA-CR-128927] p0268 N73-23082
Applications of EVA guidelines and design criteria. Volume 3: EVA systems cost model formating
[NASA-CR-128928] p0268 N73-23083

BROWN, O. R.
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria.
p0117 A73-19483
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Mechanisms of oxygen toxicity at the cellular level
[AD-758725] p0299 N73-25124

BROWN, R.
Gas diffusion across collateral channels.
p0048 A73-14113

BROWN, R. D.
Thermoluminescent dosimetry for the Apollo 16 microbial response to space environment experiment (M191)
p0292 N73-24115

BROWN, T. E.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056

BROWNE, D. E.
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983

BRUCE, R. A.
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946

BRUCE, W. E.
Ocular effects of repetitive laser pulses
[AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097

BRUDER, G. E.
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097

BRUENER, H.
A new method to record heart rate and respiratory rate inflight on cockpit crews
p0367 N73-27953

BRUMBERG, V. A.
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Influence of histotoxic hypoxia on the activity of lactic dehydrogenase isoenzymes in neurons and neuroglia of various sections of the central nervous system
p0428 A73-44429

BRUNTON, J.
Gas diffusion across collateral channels.
p0048 A73-14113

BRUSAKOV, M. I.
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749

BRUSILOVSKII, B. M.
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623

BRYAN, A. C.
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783

BRYAN, M.
Noise laws don't protect the sensitive.
p0430 A73-44770

BRYANOV, I. I.
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057

BRYZHATYY, A. G.
Interaction of man-machine systems
[JPRS-58290] p0178 N73-18136
Interaction between man and an electronic computer in operational planning
p0178 N73-18138

BUBERNAK, J.
Characterization and properties of medical grade Pu-238 fuels
[LA-DC-72-473] p0067 N73-12115

BUCCI, T. J.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085

BUCHTHAL, F.
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995

BUCK, L.
Sleep deprivation effects on accuracy and speed of response selection and execution.
p0385 A73-40853
Sleep deprivation effects on accuracy and speed of response selection and execution
p0422 N73-31854

BUCKLEY, B. E.
Acuities for spatial arrangement in line figures - Human and ideal observers compared.
p0129 A73-21564

BUCKMAN, J. E.
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels.
p0077 A73-16151

BUCKY, S. F.
Need satisfaction in the identification of the DOR.
p0247 A73-30513

BUDAGOVSKII, A. I.
Distribution of the long-wave radiation fluxes and the radiation balance in plant cover
p0378 N73-29322

BUDERER, M. C.
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788

BUDINGER, T. F.
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space
[LBL-10111] p0186 N73-19134

BUDKO, V. M.
An electrical model of the inertial and adaptive properties of vision as a self-regulating system with delayed feedback
p0354 A73-39004

BUDYKO, M. I.
Interaction between man and biosphere
[JPRS-59366] p0339 N73-27065

BUECHNER, H. K.
Satellite (IRLS) tracking of elk
[NASA-CR-130301] p0104 N73-15090

BUECKER, H.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
The Biostack experiment on Apollo 16.
p0399 A73-42185
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
Microbial response to space environment, part B
p0232 N73-21762
The BIOSTACK experiment on Apollo 16
p0266 N73-23062
Effects of space vacuum and solar ultraviolet irradiation (254 nanometers) on the colony forming ability of Bacillus subtilis spores
p0291 N73-24108

BUGAI, IU. P.
An optical model of a detector of oriented segments of the visual analysor in animals p0061 A73-15795
Optical electronic model of local detectors of the visual analysor p0432 A73-44912
BUGAR, K. P.
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats p0254 N73-22004
BUGROV, S. A.
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere p0181 N73-19089
BUIST, M.
Direct measurement of sensible heat transfer between man and his environment. p0049 A73-14123
BULL, L. S.
Effect of chronic centrifugation on body composition in the rat. p0042 A73-13370
BULLARD, R. W.
Physiological problems of space travel. [AFOSR-72-2451TR] p0312 A73-35856
BULLOCK, P. J.
A study of liver microsomal cytochromes following chronic exposure to dichloromethane [NASA-TM-X-69101] p0176 N73-18128
BUNINOVICH, S. G.
Ways of enhancing the efficiency of physical exercise p0280 A73-31515
Ways to increase effectiveness of physical training p0263 N73-23039
BURAKHIN, V. M.
Universal transistorized stimulator with external control p0084 A73-16739
BURD, J.
Need satisfaction in the identification of the DOR. p0247 A73-30513
BURDESHAW , J.
Isometric effects on treadmill exercise response in healthy young men. p0165 A73-23842
BURFORD, C. L.
Aerobic capacity of relatively sedentary males. p0353 A73-38360
BURGASOV, P. N.
Sanitation norms of permissible noise in living accommodations, public building, and in the territory of habitable buildings [NASA-TT-F-15065] p0414 N73-30088
BURGHAT, M.
Effect of sonic boom on hearing and vestibular equilibrium p0327 A73-36910
The value of data processing in the analysis of visual evoked potentials p0327 A73-36911
BURGER, M. J.
Effect of a predictor display on carrier landing performance. Phase b: Display mechanization and preliminary evaluation [AD-750294] p0103 N73-14102
BURIAN, H. M.
Practical aspects of depth perception. p0079 A73-16483
BURKHARDT, E.
Physiological response to prolonged muscular activity p0271 N73-23990
BURMISTROV, IU. M.
Circulation of nervous impulses in the cerebral cortex p0248 A73-30569
BURNETT, R. D.
The industrial hygiene survey [AD-751897] p0151 N73-17126
BURNHAM, R. W.
Threshold and suprathreshold perceptual color differences. p0275 A73-31019
BURR, R. G.
Circadian rhythm of urinary calcium excretion during immobilization. p0247 A73-30512
BURROWS, A. A.
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach. p0584 A73-11857
BURTON, G. J.
Evidence for non-linear response processes in the human visual system from measurements on the thresholds of spatial beat frequencies. p0308 A73-34839
BURTON, R. M.
Organ and body mass changes in restrained and fasted domestic fowl. p0057 A73-14975
Positive /+Gz/ acceleration tolerances of the miniature swine - Application as a human analog. p0196 A73-25337
BURYIKOV, I. N.
Functional disturbances during hypokinesia in man [NASA-TT-F-15148] p0450 N73-33073
BURZA, ZH. B.
Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation p0239 A73-29073
BUSH, V. M.
The examination of urine samples for pathogenic microbes by the luciferase assay for ATP. 1: The effect of the presence of fungi, fungal like bacteria and kidney cells in urine samples [NASA-CR-130797] p0173 N73-18096
BUSKIRK, E. R.
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle. p0580 A73-10774
A system for automatic end-tidal gas sampling at rest and during exercise. p0362 A73-39794
BUTCHER, A. K.
Acuities for spatial arrangement in line figures - Human and ideal observers compared. p0129 A73-21564
BUTUKHANOV, V. V.
Action of stable and pulsed noise on the processes of skeletal muscle excitation p0402 A73-42662
BUYANOV, P. V.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning p0182 N73-19095
BUYVOLOVA, M. M.
Changes in cerebral, pulmonary and peripheral blood circulations p0255 N73-22012
BUZNIK, I. M.
Vitamin metabolism alteration under increased atmospheric pressure p0193 A73-25036
Elimination of creatinine in the urine during prolonged hypokinesia p0444 N73-33029
BYCHKOV, M. V.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products p0124 A73-20984
Radiation oxidation of water impurities in moisture-containing products of man's vital functions p0134 N73-16051
BYCHKOV, V. P.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights p0184 N73-19113
BYNUM, B. G.
Ergometer [NASA-CASE-MFS-21109-1] p0366 N73-27941
BYRNE-QUINN, M.
Augmentation of chemosensitivity during mild exercise in normal man. p0080 A73-16610
BYKOV, A. L.
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell p0435 A73-45250

C

CABANAC, M.
Thermoregulatory behaviour in Rana esculenta - Effects of spinal cord heating
p0426 A73-43994

CABULA, O.
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213834/1] p0267 N73-23073

CADOTTE, J. E.
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975

CAIN, S. M.
Relative rates of arterial lactate and oxygen-deficit accumulation in hypoxic dogs.
p0281 A73-31922

CAIRNS, E. J.
Research on oxygen recovery systems for use in space capsules
[NASA-CR-114573] p0300 N73-25130

CAKE, D.
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890

CALCATERRA, P. C.
Effect of vertical active vibration isolation on tracking performance and on ride qualities
[NASA-CR-2146] p0066 N73-12109

CALDWELL, M. M.
A linear motion generator for physiological research.
p0577 A73-10173

CALL, D. W.
A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0155 A73-22537

A study of Halon 1301 /CBrF3/ toxicity under simulated flight conditions.
p0329 A73-36930

Human and rat exposures to Halon 1301 under hypobaric conditions
[AD-747958] p0066 N73-12106

CALLAHAN, E.
A study of liver microsomal cytochromes following chronic exposure to dichloromethane
[NASA-TM-X-69101] p0176 N73-18128

CALLENS, M.
Movement perception during voluntary saccadic eye movements.
p0308 A73-34845

CALLIHAN, C. D.
Single-cell protein from waste cellulose
[NASA-CR-130300] p0106 N73-15115

CALVERT, T. W.
A model to predict respiration from VCG measurements.
p0123 A73-20578

CALVIN, M.
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products.
p0202 A73-26479

CAMERON, B. J.
Measurement of operator workload in an information processing task
[NASA-CR-2150] p0070 N73-13087

CAMERON, R. G.
Should air hostesses continue flight duty during the first trimester of pregnancy.
p0248 A73-30519

CAMMACK, R.
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318

CAMPBELL, B. O.
Adrenocorticotrophic hormone levels in ground based studies
p0174 N73-18109

CAMPBELL, E. J. M.
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776

CAMPBELL, J. E.
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-129272] p0065 N73-12101

Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-133223] p0333 N73-26058

Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059

CAMPBELL, K. I.
Toxicology of atmospheric sulfur dioxide decay products
p0099 N73-14071

CAMPION, B. C.
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544

CAMPORESI, E.
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504

CANDAS, V.
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220

CARACTA, A. R.
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843

CARAFFA-BRAGA, E.
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533

CARDINALI, D. P.
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644

Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657

CAREW, T. E.
Localizing factors in experimental atherosclerosis.
p0320 A73-36536

CARIDROIT, M.
Apparent plasma hyperosmolality in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079

CARL, G. B.
Air conditioned suit
[NASA-CASE-LAR-10076-1] p0221 N73-20137

CARL, I.
The effects of hypoxia and acceleration on enzyme activities in erythrocytes and plasma
[DLR-FB-72-71] p0137 N73-16070

CARLSON, E. L.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661

CARLSON, J.
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180

CARLSON, R. E.
Remote detection of moisture stress: Field and laboratory experiments
p0068 N73-13070

CARLSOO, S.
How man moves: Kinesiological studies and methods.
p0048 A73-13993

CARLSSON, E.
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345

CARMICHAEL, J. B., JR.
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926

CARR, E.
Visual search, complex backgrounds, mental counters, and eye movements.
p0388 A73-41185

CARO, P. W.
Determining training device requirements in fixed wing aviator training
[AD-744447] p0604 N73-10158

CARPENTER, A.
Perceptual confusions between four-dimensional sounds
[OES-6/72] p0421 N73-31023

CARPENTER, W.
Handling system for Iridium-192 seeds

p0231 N73-21143
CABE, R. H.
A statistical evaluation of the injury potential of a square wave energy absorber
[AD-745919] p0612 N73-11102
Inflatable restraint concept for general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127
CARRANCIO DE LA PLAZA, F.
Ocular tension in flying personnel
p0383 A73-40347
CARRAWAY, J.
Miniature biotelemeter giving 10 channels of wideband biomedical data.
p0058 A73-15388
CARRE, R.
Systematic X-ray photography of flight personnel and lung tuberculosis
p0586 A73-12155
Does Carpentier's reconstructive valvuloplasty reopen the question of the inaptitude for flight of flight personnel with mitral prostheses
p0586 A73-12157
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
Detection of atherosclerosis in examinations of flight personnel.
p0328 A73-36913
CARRERA, C. J.
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
CARRIE, J. R. G.
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
CARRINGTON, J. H.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
CARROL, P.
The evolution of lignin - Experiments and observations.
p0241 A73-29649
CARROLL, J. B.
Handling the hijacker.
[AD-757130] p0589 A73-12564
CARTER, C. A.
Mathematical modeling of the glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056
CARTER, D. I.
Human exposure criteria to laser energy
p0266 N73-23067
CARTER, J. E. L.
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504
CARTER, N.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
CARTERETTE, E. C.
An earphone coupling system for acute physiological studies.
p0581 A73-10829
CASE, H. C.
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012
CASIDA, L. E., JR.
Responses of indigenous microorganisms to soil incubation as viewed by transmission electron microscopy of cell thin sections.
p0241 A73-29724
CASSAN, MR
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
CASSIDY, W. B.
Relating operator capabilities to system demands.
p0082 A73-16722
CASSIN, J. H.
Correlation of in situ fluorescence and bioluminescence with Biota in the New York Bight
[BNL-568J] p0252 N73-21978
CASTELLANOS, A., JR.
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445
CASTELLS, L.
Effect of monochromatic light on blood constants
[NASA-TT-F-14941] p0297 N73-25111
CASTLE, B. L.
Body water compartments during bed rest: Evaluation of analytical methods
[NASA-TR-R-406] p0295 N73-24133
CASTLE, J.
Automatic microscopy for mitotic cell location.
p0206 A73-27144
CATIER, J.
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio
p0434 A73-45159
CATLETT, G. P.
Management of cataract in commercial flight personnel.
p0329 A73-36927
CAULA, J. M.
Does Carpentier's reconstructive valvuloplasty reopen the question of the inaptitude for flight of flight personnel with mitral prostheses
p0586 A73-12157
CAVANILLES, J. M.
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
CAVONIUS, C. R.
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
CAWTHORN, J. M.
Factors influencing public acceptance of STOL noise
p0441 N73-32960
CAZORLA, A.
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122
CECCHINI, L. R.
Further observations on the relationship of EMG and muscle force
p0599 N73-10117
CHADWICK, A. H.
Damage control suit system
[AD-762428] p0370 N73-27976
CHAFFIN, D. B.
Link system of the human torso
[AD-754924] p0223 N73-20151
CHAGOVETS, N. E.
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
Adenonucleotides, NAD+, and NADH in skeletal muscles during intensive work and at rest
p0116 A73-19475
Adenin-nucleotides NAD (plus) and NADH in skeletal muscles during intensive work and at rest
[NASA-TT-F-14856] p0219 N73-20118
CHAIKIN, G.
Human factors/human engineering (HFHE)
[AD-763168] p0415 N73-30094
CHAINOVA, L. D.
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
CHALABIAN, ZH. A.
Effect of convulsions on certain aspects of the biosynthesis of proteins in the brain cortex
p0384 A73-40750
Biosynthesis of RNA in the brain cortex during various functional states
p0389 A73-41262
CHAMBERLIN, R. I.
Laboratory hood design
p0144 N73-17063

CHAMBERS, A. B.
Comparative study of patches for liquid cooled garments.
p0345 A73-37404
A study of the thermoregulatory characteristics of a liquid-cooled garment with automatic temperature control based on sweat rate: Experimental investigation and biothermal man-model development
[NASA-TN-D-7311] p0299 N73-25126
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] p0334 N73-26071
CHAMPAGNE, E. B.
Evaluation of holographic elements in a heads-up display
[AD-758057] p0295 N73-24139
CHAN, A.
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
CHAN, M.
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
CHANDER, A.
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
CHANDLER, B. F.
Evaluation of crashworthiness test data.
[SAE PAPER 730290] p0306 A73-34655
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
CHANDRARATNA, P. A. N.
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction.
p0201 A73-26287
CHANG, S.-K.
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801
CHAO, F.
Macromolecular fractionation and determination
[NASA-CR-114673] p0438 N73-32009
CHAPANIS, A.
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241
CHAPELLE, M.
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564
CHAPLAN, R. D.
Psychosocial factors in coronary heart disease
p0143 N73-17054
CHAPPELLE, E. W.
Method of detecting and counting bacteria in body fluids
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] p0438 N73-32011
CHARLES, J. P.
Automated flight training (AFT). Instrument flight maneuvers
[AD-759366] p0341 N73-27080
CHARNASSON, G.
Cortical and intracortical study of the frontal visual evoked potential in photosensitive Papio papio
p0434 A73-45159
CHASABOVA, N. A.
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
CHASE, M. H.
Patterns of reflex excitability during the ontogenesis of sleep and wakefulness.
p0052 A73-14264
CHASE, R. C.
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft.
p0386 A73-41154
Stress and strain in student helicopter pilots.
p0386 A73-41155
Ethyl alcohol and pilot performance: Military implications of in-flight studies
p0227 N73-21113
CHASSAY, C. E.
Microbial response to space environment, part B
p0232 N73-21762
CHATALBASHIAN, S. P.
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
CHATELIER, G.
Technique for extemporaneously obtaining an electroencephalogram
p0330 A73-36937
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
CHATIGNY, M.
Release of bacterial spores from the inner walls of a stainless steel cup subjected to thermal stresses and mechanical shock
[NASA-CR-133868] p0416 N73-30987
CHATIGNY, M. A.
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-131091] p0186 N73-19127
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-133638] p0375 N73-29049
CHATO, J. C.
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
CHATONNET , J.
Energy supply in acute cold-exposed dogs.
p0324 A73-36655
CHAYNOVA, L. D.
Informative parameters of the psychophysiological state of flight personnel when working with an indicator
p0373 N73-29035
Ergonomics research methods
p0414 N73-30086
CHEITLIN, M. D.
Sinus venosus atrial septal defect - Analysis of fifty cases.
p0121 A73-20368
CHEKAILO, M. A.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
CHEKHONADSKIY, M. A.
Some properties of a mathematical analog of the central portion of a vestibular analyzer
[NASA-TT-F-15130] p0420 N73-31015
CHEN, M.
Resistance of soil microorganisms to starvation.
p0589 A73-12627
Survival of soil bacteria during prolonged desiccation.
p0251 A73-30959
CHEN, W.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] p0612 N73-11097
CHENG, H.
Frequency content of nystagmus.
p0237 A73-28502
CHERNIKHIN, M. A.
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073
CHEREPAKHIN, M. A.
Human sensorimotor coordination following space flights.
p0397 A73-42170
CHERKOVICH, G. M.
Emotional overstress effects on the indices of the blood coagulation system in monkeys
p0249 A73-30846
CHERNIACK, N. S.
Ventilatory responses to transient hypoxia and

hypercapnia in man.
p0275 A73-31126
CHERNIAKOV, I. N.
Tissue oxygen in the presence of extremal flight factors
p0116 A73-19425
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
CHERNIAVSKAIA, G. V.
Nerve mechanisms in the control of capacitance vessels
p0426 A73-43927
CHERNIGOVSKAIA, S. V.
Emotional overstress effects on the indices of the blood coagulation system in monkeys
p0249 A73-30846
CHERNIGOVSKII, V. N.
Coordination relations in the activity of certain internal organs
p0575 A73-10154
CHERNIGOVSKIY, V. N.
Problems of Space Biology, volume 16
[NASA-TT-F-719] p0180 N73-19077
CHERNIKOVA, L. I.
The role of the sympathetic section of the vegetative nervous system in the training of the organism for the influence of statokinetic irritants.
p0327 A73-36903
CHERNOGRIADSKAIA, N. A.
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
CHERNOVICH, I. L.
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
CHERNYAKOV, I. N.
Safety of life and health of crews of spacecraft and space stations in emergency situations
[NASA-TT-F-14997] p0339 N73-27068
Search for effective regimes for desaturation of the human body for preventing high-altitude decompression disorders
p0372 N73-29029
Problems of space biology. Volume 21: Tissue oxygen under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065
CHERNYKH, I. V.
Dosimetry of space radiations
p0173 N73-18100
CHERSKI, P.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems
p0255 N73-22008
CHERVOV, V. G.
Image analysis by neuron-like structures
p0060 A73-15789
An optical model of a detector of oriented segments of the visual analysor in animals
p0061 A73-15795
Optical electronic model of local detectors of the visual analysor
p0432 A73-44912
CHESNEK, IA.
Dynamic katathermometer for measuring the cooling effect of an ambient medium
p0280 A73-31512
CHESNOKOVA, N. B.
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430
CHESTER, E. H.
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067
CHEVALERAUD, J. P.
Ocular tonus and aptitude in flight personnel
p0586 A73-12158
Binocular vision variation with age in flight crews
p0329 A73-36928
Examination of chromatic sense in French aerial forces
p0179 N73-19068
Ophtalmologic surveillance of absorbed antimalaria drugs in systems of navigation personnel
p0228 N73-21122
CHIA-KIANG, S.
Analysis of electrocardiograms of Rhesus monkeys (Macaca mulatta)
[NASA-TT-F-14675] p0136 N73-16062
CHIANG, C.
A theory of the Mueller-Lyer illusion.
p0120 A73-20255
CHIANG, S. T.
Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332
CHIANTA, M. A.
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532
CHIBA, Y.
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/.
p0282 A73-32185
CHIBALASHVILI, IU. L.
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657
CHIBRIKIN, V. M.
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
CHICHE, P.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505
CHIKIN, M. M.
Microflora of a sealed cabin with human subjects in a 3-day experiment with reduced temperature and high relative humidity
p0088 A73-17697
Microflora in a closed cabin in a three-day experiment with human subjects at a reduced temperature and high relative humidity
p0065 N73-12098
CHILAIA, S. M.
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
CHILDERS, D. G.
Distribution of ocular dominance and effect of image clarity.
p0153 A73-21893
Complex demodulation of visual evoked responses.
p0203 A73-26497
Monocular contribution to binocular vision in normals and amblyopes.
p0237 A73-28359
CHILDS, J. M.
Effects of noise and response complexity upon vigilance performance.
p0086 A73-17523
The effects of noise and response complexity upon vigilance performance
[AD-747797] p0072 N73-13105
CHILES, W. D.
Intellectual ability and performance on a non-verbal problem-solving task.
p0044 A73-13553
CHIRIFE, R.
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
CHIRKIN, M. D.
Analysis of the mechanism of interoceptive reflexes in altitude meteorism
p0252 N73-21982
CHIRKOV, V. V.
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
CHISTOVICH, I. A.
Functional model of the frequency channel of the

peripheral auditory analysor
p0164 A73-23808
CHISTOVICH, L. A.
Study of the peripheral auditory adaptation in a psycho-acoustic experiment
p0164 A73-23807
Functional model of the frequency channel of the peripheral auditory analysor
p0164 A73-23808

CHISUM, G. T.
Flashblindness recovery following exposure to constant energy adaptive flashes.
p0238 A73-28505
Flashblindness recovery following exposure to constant energy adaptive flashes
[AD-747631] p0071 N73-13095
CHIZHOV, S. V.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
Advanced methods of recovery for space life support systems.
p0347 A73-37711
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051
Investigation of decontaminating properties of sorbents used in the life support system of spaceships
p0374 N73-29038
CHIZHADZHEV, IU. A.
A formalism of correlative functions for describing neuron networks
p0389 A73-41277
CHKHENKELI, S. A.
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
CHOBOTAS, B. A.
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
CHORLEY, B. A.
Human factors.
p0204 A73-26500
CHOU, T.-C.
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891
CHOVET, J.
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951
CHOW, C. K.
The reconstruction of three-dimensional objects from two orthogonal projections and its application to cardiac cineangiography.
p0089 A73-17801
CHRISTENSEN, E.
Water intoxication as a side effect of chlorpropamide therapy
[NASA-TT-F-14597] p0609 N73-11077
CHRISTENSEN, E. D.
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
CHUBB, G. P.
Monte Carlo simulation of degraded man-machine performance
p0270 N73-23899
CHUDAKOV, V. N.
Algebraic nature of thought formation structures
p0431 A73-44905
CHUDNOVA, L. B.
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials
p0087 A73-17681
Polyurethane foam sterilization by the gas method.
p0395 A73-42160

CHURCHILL, E.
Anthropometry of US Army aviators, 1970
[AD-743528] p0605 N73-10162
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
CHUZHENKOVA, R. A.
Analysis of the changes in glial cell numbers in the auditory cortex during the application of acoustic stimuli of various intensities
p0401 A73-42653

CIPRIANO, L. F.
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602

CIRILLO, L.
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522

CISSIK, J. H.
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163

CLARK, C.
Velocity distribution in aortic flow.
p0408 A73-43104
Response surface methodology central-composite design modifications for human performance research.
p0430 A73-44773
Response surface methodology design variants useful in human performance research
[AD-748236] p0102 N73-14099
CLARK, D. L.
Effects of weightlessness on the development of the vestibular apparatus and ocular nystagmus in the rat
[NASA-CR-114569] p0149 N73-17112
CLARK, D. W.
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038

CLARK, J. L.
General and specific factors in the intersensory transfer of form.
p0043 A73-13525

CLARK, K. J.
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095
CLARKE, A. H.
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42673

CLARKE, J. C.
An evaluation of the training effectiveness of device 2F90, TA-4J operational flight trainer. Part 1: The B stage
[AD-750248] p0113 N73-15170
CLARKE, P. G. H.
Visual evoked potentials to changes in the motion of a patterned field.
p0435 A73-45167
Comparison of visual evoked potentials to stationary and to moving patterns.
p0435 A73-45168

CLARKSON, D. P.
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201

CLAUSER, C. E.
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
CLAYTON, R. K.
Studies of photosynthetic energy conversion
[COO-3162-9] p0070 N73-13091
CLEMENT, D. E.
Group performance in a visual signal-detection task.
p0194 A73-25182

CLEMENT, J.
A physical model of expiration.
p0577 A73-10169
Peak expiratory flow rate and rate of change of pleural pressure.
p0391 A73-41636

CLEMENT, W. F.
Manual control theory applied to air traffic controller-pilot cooperation
p0598 N73-10113

CLEMENTE, C. D.
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
CLEMENTE, G.
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965
CLEVELAND, G. J.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045
CLIFF, R. C.
The effects of attention sharing in a dynamic dual task environment
p0602 N73-10140
CLIFFORD, C. E.
Relationships between dosimeter response and absorbed dose for 0.66-MeV gamma rays and for 2.9-MeV neutrons
[AD-743005] p0593 N73-10077
CLIFFORD, J. M.
Use of hypnotics by aircrew: Considerations of metabolism and excretion
p0228 N73-21118
CLIFTON, J. W.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064
CLINE, W. H., JR.
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
CLYNES, M.
Sentography - Dynamic forms of communication of emotion and qualities.
p0427 A73-44180
COADY, J. D.
Technician requirements for maintenance of microelectronics equipment in the fleet
[AD-748040] p0074 N73-13123
COATES, G. D.
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
COBB, B. B.
Proposed new test for aptitude screening of air traffic controller applicants.
p0155 A73-22535
A comparative study of female and male air traffic controller trainees
[FAA-AM-72-22] p0611 N73-11094
Attrition-retention rates of air traffic control trainees recruited during 1960 - 1963 and 1968 - 1970
[FAA-AM-72-33] p0222 N73-20140
COBB, E. K.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
COBB, P. B.
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638
COBB, J.
A projected grid method for recording the shape of the human face
[RAE-TR-71184] p0141 N73-16099
COBIAN, K. E.
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975
COCHEME, J.
A study of the agroclimatology of the highlands of eastern Africa
[WMO-339] p0446 N73-33045
COCHEN, P.
Apparent plasma hyperosmolality in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079
COEMEN, A. M. L.
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
COESTER, M.
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
COGAN, E.
Patterns of changes in binocular contour rivalry.
p0044 A73-13557
COHEN, A. I.
Rods and cones.
p0160 A73-23303
COHEN, B.
The origin of quick phases of nystagmus in the horizontal plane.
p0316 A73-36436
Cerebellar ablations and spontaneous eye movements in monkey.
p0317 A73-36447
COHEN, E.
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
COHEN, H. M.
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
COHEN, H. S.
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
COHEN, R.
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549
COHN, K.
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890
COIL, E. F.
Influence of increased ambient pressure and gas density on cardiac rate in man
[AD-755129] p0261 N73-22058
COLBURN, H. E.
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] p0438 N73-32011
COLE, C. E.
Indirect blood pressure measuring device
p0231 N73-21144
COLEMAN, A. E.
Aerobic capacity of relatively sedentary males.
p0353 A73-38360
COLEMAN, G.
Physiological response to prolonged muscular activity
p0271 N73-23990
COLEMAN, H. M., III
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
COLEMAN, P. D.
Automated three-dimensional dendrite tracking system.
p0359 A73-39763
COLIN, J.
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Tolerance to immersion in cold water
p0331 A73-36943
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951
COLLEWIJN, H.
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455

COLLEY, I. A.
Predictive modeling of altitude decompression sickness in humans
[NASA-CR-114550] p0136 N73-16066
COLLINS, C. R.
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213834/1] p0267 N73-23073
COLLINS, A. M.
Decrements in tracking and visual performance during vibration.
p0431 A73-44777
COLLINS, L. S.
Medical Information Management System (MIMS): A generalized interactive information system
[NASA-TM-X-66076] p0604 N73-10156
COLLINS, W. E.
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151
Simulated sonic booms and sleep: Effects of repeated booms of 1.0 PSF
[FAA-AM-72-35] p0333 N73-26057
Alcohol and disorientation related responses. 6: Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about the yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
COLLIS, M.
Thermographic evaluation of relative heat loss areas of man during cold water immersion.
p0325 A73-36781
COLOMBO, G. V.
Study of CO2 sorbents for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
COLQUHOUN, W. P.
Vigilance under induced hyperthermia.
p0095 A73-18469
Biological rhythms and human performance.
p0286 A73-33154
Circadian variations in mental efficiency.
p0286 A73-33156
Efficiency in heat after a night without sleep
[OES-8/72] p0421 N73-31024
COLTON, C. K.
Mechanism of oxygen transport augmentation by hemoglobin.
p0362 A73-39795
COLTON, J. S.
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072
CONSTOCK, G. M.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
CONDE, M.
Intranuclear organization of the center median nucleus of the thalamus.
p0240 A73-29175
CONGDON, M. B.
Surface contaminants.
p0096 A73-18547
CONNELLY, M. E.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112
CONNOR, A. B.
Ride quality research activities at NASA Langley Research Center
p0591 N73-10024
CONOVER, M. H.
Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359
CONRAD, B.
Unusual properties of repetitive fasciculations.
p0359 A73-39761
CONRAD, D. W.
The interaction of auditory noise and subjective noise annoyance sensitivity with peripheral visual sensitivity.
p0081 A73-16703
CONREUR, L.
Influence of the dazzling of an eye on the state of adaptation of the congeneric eye in a normal subject
p0245 A73-30388
COOK, E. A.
GPSS/360 computer models to simulate aircraft passenger emergency evacuation
[FAA-AM-72-30] p0150 N73-17119
COOK, K. M.
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071
COOKSON, J. H.
Use of hypnotics by aircrew: Considerations of metabolism and excretion
p0228 N73-21118
COOPER, C. R.
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125
COOPER, C. V.
The toxicity of pyrolysis products from a chlorotrifluoroetyhylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080
COOPER, G.
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
COOPER, J. B.
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823
COPE, F. W.
Evidence for activated interfacial charge transport in low-G acceleration stress
[AD-749338] p0100 N73-14079
COPELAND, B. J.
Study of space shuttle EVA/IVA support requirements. Volume 1: Technical summary report
[NASA-CR-133991] p0414 N73-30089
Study of space shuttle EVA/IVA support requirements. Volume 2: EVA/IVA tasks, guidelines, and constraints definition
[NASA-CR-133992] p0419 N73-31007
Study of space shuttle EVA/IVA support requirements. Volume 5: Requirements study for space shuttle emergency 4 support
[NASA-CR-133995] p0419 N73-31010
COQUERY, J.-M.
Motor functions and control of sensorial messages of somatic origin
p0240 A73-29174
CORBIN, B.
An evaluation of the effects of bed rest, sleep deprivation and discontinuance of training on the physical fitness of highly trained young men
[NASA-CR-134044] p0438 N73-32008
CORBIN, M.
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891
CORBIN, M. J.
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
CORCORAN, W. H.
Analysis of pressure waves as a mean of diagnosing vascular obstructions.
p0346 A73-37524
CORDES, W. F., III
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
CORINTH, G.
A universal preamplifier for bioelectric signals
p0383 A73-40345
CORN, C.
The evolution of lignin - Experiments and observations.
p0241 A73-29649
CORNSWEET, T. N.
Training the visual accommodation system.
p0129 A73-21569
CORONA, B. M.
Perception of symmetrically distributed weight on the head
[AD-748412] p0261 N73-22056
CORREALE, J. V.
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991

CORRIOL, J.
The role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072
CORYA, B. C.
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869
COSGROVE, M. P.
Human receptive field characteristics - Probe analysis of stabilized images.
p0120 A73-20252
COSTELLO, L. C.
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
COSTILL, D. L.
Adequacy of the Haldane transformation in the computation of exercise oxygen consumption in man.
p0324 A73-36658
COTTINI, C.
An instrument with 240 probes for mapping the cardiac potential
p0167 A73-24422
COUDERT, J.
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523
COULSHED, N.
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome.
p0199 A73-25698
COURT, L.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
COURT, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
COVARRUBIAS, E.
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523
COVELL, J. W.
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689
COVVEY, H. D.
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469
COVVEY, J.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
COWEY, A.
Frontal eye-field lesions in monkeys.
p0317 A73-36446
COX, J. R., JR.
Compact digital coding of electrocardiographic data.
p0097 A73-18815
COX, J. W., JR.
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
COX, R. L.
Study of space shuttle EVA/IVA support requirements. Volume 1: Technical summary report
[NASA-CR-133991] p0414 N73-30089
Study of space shuttle EVA/IVA support requirements. Volume 2: EVA/IVA tasks, guidelines, and constraints definition
[NASA-CR-133992] p0419 N73-31007
Study of space shuttle EVA/IVA support requirements. Volume 5: Requirements study for space shuttle emergency 4 support
[NASA-CR-133995] p0419 N73-31010
CRAIG, F. N.
Oxygen uptake at the beginning of work.
p0048 A73-14118
CRAIGHEAD, F. C., JR.
Telemetry experiments with a hibernating black bear
[NASA-CR-133926] p0418 N73-31000
CRAIGHEAD, J. J.
Telemetry experiments with a hibernating black bear
[NASA-CR-133926] p0418 N73-31000
CRAMER, D. B.
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet simulated
[AD-748192] p0103 N73-14105
CRAMER, H.
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429
CRAMER, T.
The relationship between the intermediate medium and the transformation and contrast phenomena
[NASA-TT-F-15035] p0376 N73-29055
CRANE, F. L.
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032] p0136 N73-16065
Spectra of normal and nutrient-deficient maize leaves
[NASA-CR-132145] p0293 N73-24119
CRANE, H. D.
Training the visual accommodation system.
p0129 A73-21569
CRANEFIELD, P. F.
Genesis of cardiac arrhythmias.
p0097 A73-18874
CRASSINI, B.
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
CREN, M.
Systematic X-ray photography of flight personnel and lung tuberculosis
p0586 A73-12155
CREPEAU, R. L.
Electrofluoroplanigraphy.
p0389 A73-41216
CREUTZFELDT, O.
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450
CRIBORN, C.
Correlation between man and mouse in respect of physical activity and oxygen consumption
[FOA-1-B-1233-A5] p0149 N73-17108
CRICK, F. H. C.
Directed Panspermia.
p0428 A73-44553
CRISWELL, B. S.
Prodromal disease: Immune responses of the host macrophage system to humoral factors
[NASA-CR-133455] p0365 N73-27938
CROLEY, T. E.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
CROMWELL, L.
Biomedical instrumentation and measurements.
p0312 A73-35860
CRONHOLM, J. N.
A versatile, inexpensive generator of periodic visual stimuli
[AD-754562] p0223 N73-20149
CRONIN, S. E.
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
CROSBIE, R. J.
Disorienting effects of aircraft catapult launchings.
p0117 A73-19480
CROSS, C. E.
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.

p0094 A73-18335

CROSSLEY, B. J.
Effect of controlled elevation of body temperature on human tolerance to +Gz acceleration.
p0576 A73-10159

CROSSMAN, E. R. F. W.
Manual control models of industrial management
p0598 N73-10115
Estimation of automobile-driver describing function from highway tests using the double steering wheel
p0601 N73-10132

CROSTON, R. C.
A cardiovascular control system simulation for exercise
p0446 N73-33049

CROTTY, J.
The incidence of backache among aircrew and groundcrew in the Royal Air Force
[AD-745177] p0597 N73-10102

CROVITZ, H. F.
A two-stage model of brightness.
p0585 A73-12078

CRUM, G. W.
Foot pedal operated fluid type exercising device
[NASA-CASE-MSC-11561-1] p0439 N73-32014

CRUZ, J. C.
Mechanics of breathing in high altitude and sea level subjects.
p0200 A73-26217

CSERR, B.
The rapid determination of aldosterone in urine by paper chromatography
[NAE-LIB-TRANS-1682] p0333 N73-26061

CUCCARO, W. J.
Underwater work performance and work tolerance
[AD-747701] p0072 N73-13107

CURRR, P.
The Biostack experiment on Apollo 16.
p0399 A73-42185

CURR, P.
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761

CULCLASURE, D. F.
Assistance to NASA in biomedical areas of the technology utilization program
[NASA-CR-129588] p0068 N73-13071

CULPEPPER, B. W.
Psychiatric and psychometric predictability of test pilot school performance.
[AD-754148] p0050 A73-14165

CULVER, J. F.
Glaucoma development in aging flight personnel.
p0329 A73-36926
History, rationale, and verification of color vision standards and testing in the United States Air Force
p0179 N73-19069
Human exposure criteria to laser energy
p0266 N73-23067

CUMANI, A.
Automatic analysis and classification of electroencephalograms
p0309 A73-34966

CUMMING, G.
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639

CUNNINGHAM, D. J. C.
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348

CURR, M.
Sleep and cerebral temperature in the rat during the chronic exposure to a hot environment
[NASA-TT-F-15082] p0417 N73-30994

CURRIE, J. C. M.
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300

CURRY, G. R.
The orbit and superior orbital fissure as an acoustic window.
p0402 A73-42667

CURRY, R. E.
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112
A Bayesian model for visual space perception
p0600 N73-10127

CURTIS, S. B.
Frequency of heavy ions in space and their biologically important characteristics.
p0398 A73-42178

CUSSEN, D. J.
Sleep patterns in a lone global pilot.
p0307 A73-34745

CUTKOMP, L. K.
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/.
p0282 A73-32185

CUTLER, R. S.
Project SOAP: A systems approach to biomedical research program management, a case study
[NBS-TN-761] p0252 N73-21977

CZERSKI, P.
Proposals for specification of allowable levels of microwave radiation
p0415 N73-30905

D

D'ALCHE, P.
Why the heart beats
p0207 A73-27690

DA ROS, H. O.
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524

DABBERDT, W. F.
An investigation of atmospheric effects on laser propagation and the impact on eye safety
[AD-755405] p0259 N73-22044

DADIANI, A. M.
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648

DAHL, K.
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995

DAHMS, T. E.
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462

DAILEY, T. R.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143

DAINOFF, M. J.
Factors affecting the detection and recognition of colored targets
[AD-746297] p0610 N73-11083

DALLOS, P.
Study of the acoustic reflex in human beings. I - Dynamic characteristics.
p0581 A73-10828

DAMATO, A. N.
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843

DAMEN, A. A. H.
The multiple dipole model of the ventricular

depolarisation
[TH-71-B-25] p0067 N73-12116
DAN'KO, S. G.
A transistor amplifier for microelectrode circuitry with an extended range of applicability p0430 A73-44723
DANCER, A.
Influence of pressure rise time of an N shock wave, simulating the sonic boom on the cochlear and acoustically evoked potentials of the guinea pig
[ISL-31/72] p0365 N73-27940
Determination of lesion threshold in the guinea pig auditory area due to sonic boom
[ISL-33/72] p0369 N73-27966
DANFORD, D. A.
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance. p0354 A73-38868
DANFORD, H. G.
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance. p0354 A73-38868
DANFORD, H., JR.
Middle-ear muscle reflex to aircraft noise
[AD-764739] p0446 N73-33048
DANIELE, A.
An attempt to obtain an electroretinographic perimeter p0308 A73-34963
DANIELS, J. C.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity. p0589 A73-12565
DANIELS, J. D.
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons. p0424 A73-43338
DANIELSON, J. T.
In search of the neural channel which codes real light and equivalent backgrounds. p0121 A73-20258
DANILEIKO, V. I.
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles p0429 A73-44670
DANILOV, I. V.
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures p0345 A73-37393
DARDANO, J. F.
Self-imposed timeouts under increasing response requirements. p0170 A73-24625
DARDAY, K.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences. p0398 A73-42179
DARLING, R. C.
Calculation of temperature distribution in the human body. p0281 A73-31999
DARNER, K. I., JR.
The acute inhalation toxicology of chlorine pentafluoride. p0282 A73-32173
The acute toxicity of chlorine pentafluoride
[AD-751452] p0138 N73-16078
Continuous animal exposure to methylene-chloride
[NASA-TM-X-69099] p0177 N73-18129
DARNELL, W. L.
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar. p0131 A73-21828
DARSINOS, J.
Atrioventricular block response to exercise and intraventricular conduction at rest. p0583 A73-11506
DASHKEVICH, O. V.
Experimental analysis of conditions for onset of emotional stress p0362 A73-39800
DASHNIANI, M. G.
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation p0078 A73-16331
DAUBS, J. G.
Patterns of diurnal variation in the intraocular pressure of airline pilots. p0355 A73-39107
DAUGHTERS, G. T.
Regional myocardial dynamics from single-plane coronary cineangiograms. p0171 A73-24771
DAVIA, J. E.
Sinus venosus atrial septal defect - Analysis of fifty cases. p0121 A73-20368
DAVID, P.
Oxygen delivery and oxygen return to the lungs at onset of exercise in man. p0361 A73-39788
DAVID, R. M.
Insulated electrocardiographic electrodes
[NASA-CASE-MSC-14339-1] p0232 N73-21151
DAVIDENKO, V. IU.
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles p0429 A73-44670
DAVIDOV, O. S.
Quantum theory of muscle contraction p0159 A73-23297
DAVIDOVIC, J.
Intracranial hemodynamic changes in pilots to tilting. p0328 A73-36916
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats. p0331 A73-36944
DAVIDSON, M. L.
Effect of eye movements on backward masking and perceived location. p0388 A73-41184
DAVIES, P.
A method for the investigation of interpolated information and time effects in short term retention. p0096 A73-18475
DAVIS, H. V.
The acute toxicity of brief exposures to hydrogen fluoride, hydrogen chloride, nitrogen dioxide, and hydrogen cyanide singly and in combination with carbon monoxide
[AD-751442] p0139 N73-16085
DAVIS, R.
Visual and verbal coding in the interhemispheric transfer of information. p0435 A73-45337
DAVYDOV, B. I.
Effect of lunar soil on radiation injuries in mice. p0077 A73-16090
Problems of space biology. Volume 14: Radiobiological aspects of the reactivity of the organism during space flights
[NASA-TT-F-721] p0211 N73-20054
Influence of radioprotective preparations from the mercaptoalkylamine group (cystamine, S,beta-aminoethylisothiuronium) on the resistance of animals to transversely directed overloads p0211 N73-20055
Influence of monosodium salt of beta-aminoethylthiophosphoric acid on the resistance of animals to transversely directed overloads p0211 N73-20056
Influence of radioprotectors from the aminothiol group on the cardiac function of guinea pigs under the influence of overloads p0211 N73-20057
The mechanism of reduced ability to withstand overloads under the influence of radio-protective pharmacological substances

p0211 N73-20058
Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061
Elimination of cystamine in the organism and the prolongation of its radioprotective effect
p0213 N73-20069
Influence of gamma radiation on the elimination of the toxic effect of cystamine
p0213 N73-20070
Aminotransferases of the blood serum of dogs following total exposure to gamma rays with the stomach or head shielded
p0213 N73-20075
Reactivity of irradiated animals shielded by mercapto-(cystamine and tsistafos) and indolylalkylamines (5-HOT and serotonin) to transversely directed overloads
p0214 N73-20079
Influence of pharmacochemical substances on the reactivity of the organism to the combined action of gamma radiation and transverse overloads
p0215 N73-20086

DAW, H. H.
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414

DAWSON, C. T.
The transmission of low frequency medical data using delta modulation techniques.
p0058 A73-15408

DAWSON, T. J.
'Primitive' mammals.
p0406 A73-42860

DAWSON, W. W.
Brightness of a capacitor discharge lamp: Bloch's law for brief flashes
[AD-749452] p0104 N73-14109

DAY, C. H.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154

DAY, R. H.
Apparent contraction and disappearance of moving objects in the peripheral visual field.
p0200 A73-26198
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094

DAYHOFF, M. O.
Informational biopolymer structure in early living forms.
p0090 A73-17946

DE BRUIN, E. J. P.
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622

DE COSTER, A.
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124

DE DUVE, C.
In praise of biodegradation
p0385 A73-41024

DE MELLO, W. C.
Electrical phenomena in the heart.
p0197 A73-25588
Membrane lipids and cardiac electrogenesis.
p0197 A73-25591
The healing-over process in cardiac and other muscle fibers.
p0198 A73-25600

DE MENDOZA, J. L. J.
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917

DE MICHELI, A.
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200

DE SCHRIVER, C.
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498

DE VALOIS, R. L.
Single cell analysis of saturation discrimination in the macaque.
p0129 A73-21568

DE VERNEJOUL , P.
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838

DE VRIES-DE MOL, E. C.
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis.
p0585 A73-12077

DEAN, P. J.
Handling the hijacker.
[AD-757130] p0589 A73-12564

DEBORIN, G. A.
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949

DEBRECENI, L.
The rapid determination of aldosterone in urine by paper chromatography
[RAE-LIB-TRANS-1682] p0333 N73-26061

DECAUD, J.
Exchange of hand heat. The role of circulatory reactions and variations of the local temperature of arterial bloods
[NASA-TT-F-15143] p0445 N73-33043

DECICCO, B. T.
Genetic and metabolic variability in autotrophic and heterotrophic bacteria
[NASA-CR-130807] p0252 N73-21979

DECKER, A. I.
Stress studies at Kennedy Space Center: A backward and forward look
p0146 N73-17082

DECKER, L. H.
Forced guidance and distribution of practice in sequential information processing.
p0201 A73-26319

DECKMAN, G.
Intermediate water recovery system
[NASA-CR-128983] p0337 N73-26094

DEDUKHOVA, V. I.
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005

DEE, H. L.
Asymmetry in perception - Attention versus other determinants.
p0435 A73-45338

DEGANI, R.
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965

DEGONSKII, A. I.
Hypothalamo-adenohypophysio-adrenal neurosecretory system under hyperthermia
p0249 A73-30847

DEGRE, S.
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124

DEL CASTILLO, J.
Cardiac innervation and synaptic transmission in heart.
p0198 A73-25597

DELAHAYE, R. P.
Fractures of the spine during flight /concerning two cases encountered during pumping/
p0586 A73-12154
Systematic X-ray photography of flight personnel and lung tuberculosis
p0586 A73-12155
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914

DELAHAYE, R.-P.
Cosmic radiations rates and Concorde
p0204 A73-26588

DELAVELLE, P.
The capacity for muscular work in acute hypoxia

p0331 A73-36946
DELISSER, S. P.
Impact of NASA stress laboratory program on US colleges
p0147 N73-17092
DELOATCH, E. M.
Summer Biomedical Engineering Institute 1972 [NASA-CR-130809] p0178 N73-18135
The 1972 Summer Institute for Biomedical Engineering [NASA-TM-X-66214] p0231 N73-21139
DELORGE, J.
Rhesus monkey heart rate during exercise [AD-744930] p0595 N73-10089
DELP, P.
Estimation of automobile-driver describing function from highway tests using the double steering wheel
p0601 N73-10132
DEMANGE, J.
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
Modifications of performance under certain medications: Proposed measuring method
p0227 N73-21110
Effect of altitude on cerebral blood flow patterns in the smoker and non-smoker
p0229 N73-21125
DEMAREE, R. S.
Effects of altitude on the Cebus apella monkey [AD-745891] p0610 N73-11085
DEMBER, W. N.
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133
DEMBO, D. H.
Evaluation, diagnosis and treatment of common structural complications of acute myocardial infarction.
p0321 A73-36548
DEMEDTS, M.
Effects of increased external airway resistance during steady-state exercise.
p0400 A73-42417
DEMENT, W. C.
Sleep deprivation and the organization of the behavioral states.
p0052 A73-14265
DENIN, H. N.
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
DEMPSEY, J. A.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Time course of respiratory adaptation to high altitude [AD-755192] p0267 N73-23075
DENISENKO, A. A.
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
DENISON, D. M.
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
DENISOV, V. G.
Engineering psychology in aviation and astronautics
p0278 A73-31375
DENO, N. S.
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
DENOLIN, H.
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124
DERAI, C.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505
DERBGT, W. F.
Training of personnel to man the various parts of an information Centre and to operate various kinds of service
p0297 N73-24205
DERKS, P. L.
Simultaneous motor and verbal processing of visual information in a modified Stroop test.
p0153 A73-21896
DERNAMNE, R.
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
DERVIN, G. V.
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
DERYAPA, N. R.
Medical investigations
p0379 N73-29348
DESAI, D.
Long term clinical relationships of the ventricular premature beat
p0146 N73-17083
DESANDO, C. J.
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525
DESCAMP, V. A.
Regenerative particulate filter development [NASA-CR-115505] p0268 N73-23084
DESERRES, F. J.
Effects of weightlessness on simple life forms in biosatellite 2 [CONF-720441-1] p0107 N73-15119
DESPRES, S.
Hepatic lesions observed among flight crews following aviation accidents
p0330 A73-36933
DESSER, K. B.
Left ventricular blood flow velocity in man studied with the Doppler ultrasonic flowmeter.
p0159 A73-23173
DESTEIGUER, D.
High density loading of multiple occupant flotation devices.
p0284 A73-32658
DEUTSCH, S.
Applications of space teleoperator technology to the problems of the handicapped [NASA-CR-133357] p0367 N73-27949
DEVYATOV, S. V.
Principal characteristics of a method for regenerating the oxygen in pressurized chambers based on electrolysis with use of solid electrolytes
p0441 N73-33015
DEXTER, J. D.
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
DEY, D.
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft
p0282 A73-32044
The influence of a prediction display on the quasi-linear describing function and remnant measured with an adaptive analog-pilot in a closed loop
p0599 N73-10120
DEZEEUW, G.
Are subjective probabilities probabilities? [IZF-1973-3] p0268 N73-23076
DI MATTEO, J.
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
DIACHENKO, J.
A study of a cutaneous code applied to the communication needs of the working diver [AD-750268] p0113 N73-15169
DIACO, N. V.
Cardiovascular responses to sudden strenuous

exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461

DIANOV, A. G.
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701
Study of the physiological effect of replacing atmospheric nitrogen in the air with inert gases under conditions of oxygen insufficiency and increased concentrations of carbon dioxide
p0182 N73-19094
Physiological effect of the replacement of atmospheric nitrogen by inert gases at high and low temperature
p0216 N73-20095
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024

DIAZ, E.
Simulator sickness in passive observers
[FPRC-1310] p0175 N73-18119

DICHGANS, J.
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221
Adjustment of saccade characteristics during head movements.
p0201 A73-26222
Cerebral control of eye movements and motion perception; Proceedings of the Symposium, Freiburg im Breisgau, West Germany, July 20-22, 1971.
p0315 A73-36432
Visual-vestibular interaction and motion perception.
p0318 A73-36460

DICHGANS, J. M.
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863

DICK, A. O.
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184

DICK, T. H. S.
Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease.
p0408 A73-42975

DICKINSON, P. J.
Human response to transportation noise and vibration.
p0310 A73-35328

DICKSON, D. L.
Today's challenge - Optimizing the air traffic controller's role.
p0353 A73-38472

DIDDAY, R. L.
Structural models of simple sensory motor co-ordination.
p0098 A73-18890

DIDIO, L. J. A.
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522

DIEMER, K.
Oxygen diffusion in the brain. Part 1: Spatial conception and calculation of oxygen diffusion
[NAE-LIB-TRANS-1663] p0333 N73-26060

DIERLICH, U.
Effects of time shift on diurnal rhythms of 17-hydroxy corticosteroide
[DLR-FB-73-58] p0412 N73-30070

DILL, D. B.
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784

DILLON, R. T.
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488

DIMASI, F. P.
Effect of vertical active vibration isolation on tracking performance and on ride qualities
[NASA-CR-2146] p0066 N73-12109

DIMEFF, J.
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] p0259 N73-22048

DIMMICK, R. L.
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-131091] p0186 N73-19127
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-133638] p0375 N73-29049

DIMOND, S. J.
On the nature of the interhemispheric effects of fatigue.
p0157 A73-22925

DINABURG, A. D.
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280

DIPASQUALE, L. C.
The acute toxicity of brief exposures to hydrogen fluoride, hydrogen chloride, nitrogen dioxide, and hydrogen cyanide singly and in combination with carbon monoxide
[AD-751442] p0139 N73-16085

DISANTO, F.
Domestic applications for aerospace waste and water management technologies
p0075 N73-13849

DIUBKO, G. F.
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790

DIVINA, L. IA.
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513

DIVINA, L. Y.
Change in cardiac activity and its phase structure during lower body decompression
p0263 N73-23037

DJORDJEVIC, Z.
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159

DLUSSKAIA, I. G.
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233

DLUSSKAIA, I. G.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019
Effect of hypodynamia and other spaceflight factors on the excretion of 17-hydroxycorticosteroids and aldosterone
p0373 N73-29031

DMITRIEV, A. S.
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation
p0242 A73-30022

DNEPROVAIA, T. F.
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003

DOANE, D. H.
A multichannel electromagnetic flowmeter telemetry system.
p0052 A73-14283

DOBBS, M. E.
Arousal from sleep by noises from aircraft with and without acoustically treated nacelles
[NASA-CR-2279] p0338 N73-27058

DOBROKHAVOVA, N. N.
Auto-antibodies of an irradiated organism
p0060 A73-15711

DOBROV, N. N.
Rate of recovery of radioresistance with the combined application of ionizing radiation and

dynamic flight factors on the organism
p0214 N73-20080
Influence of cystamine combined with sympathomimetic amines on reparative processes following the action of radiation and overloads
p0214 N73-20081
Magnitude of the irreversible portion of radiation damage with the combined action of radiation and acceleration
p0214 N73-20082
Influence of preliminary administration of the radioprotector final on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
State of the peripheral blood of irradiated animals under prolonged conditions of reduced barometric pressure
p0215 N73-20088

DOBRY, E.
Polyvinylpyrrolidone used as cryoprotective substance for erythrocyte preservation [NASA-TT-F-14590]
p0069 N73-13076

DOBSON, R.
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495

DODGE, H. T.
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947

DOHM, G. L.
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135

DOLABCHIAN, Z. L.
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751

DOLIVO, M.
Human calorimeter with a new type of gradient layer.
p0324 A73-36662

DOLL, E.
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933

DOMANIECKI, J.
Thermoregulation during physical exercises of men with diverse physical performance capacities [NASA-TT-F-15142]
p0437 N73-32003

DOMINIC, M.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860

DONOVAN, F. M., JR.
Biomedical engineering support [COO-2155-4]
p0102 N73-14095

DOROSHCHUK, V. P.
Responses of bulbar respiratory neurons to apparatus-aided artificial respiration
p0081 A73-16699

DOROSHENKO, A. M.
A diagnostic program - Problems of predicting myocardial infarction on a digital computer
p0354 A73-38998

DOROSHENKO, I. I.
Temperature of exhaled air of healthy subjects
p0323 A73-36583

DOSE, K.
Molecular evolution and the origin of life.
p0205 A73-27049

DOSIAK, J.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757

DOSSETT, A. M.
EEG activity of rats compressed by inert gases to 700 feet and oxygen-helium to 4000 feet.
p0195 A73-25327

DOTSENKO, M. P.
Neuron-like elements in the activity of restoration organs
p0431 A73-44904

DOTTI, D.
An instrument with 240 probes for mapping the cardiac potential
p0167 A73-24422

DOUGHERTY, R.
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786

DOUGLAS, J. A.
Hegarad plastic film dosimeter.
p0427 A73-44212

DOUGLAS, M. A.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797

DOUTHIT, T. D. M.
USAF Technical Objective Document (TOD): Aerospace biotechnology [AD-759277]
p0300 N73-25135

DOW, B. M.
Servo-controlled moving stimulus generator for single unit studies in vision.
p0246 A73-30401

DOWD, P. J.
The USAFSAM selection, test, and rehabilitation program of motion sick pilots
p0225 N73-21098

DOWSE, G. E.
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946

DOWNEY, J. A.
Calculation of temperature distribution in the human body.
p0281 A73-31999

DOYLE, J. T.
Cigarette-smoking and coronary atherosclerosis.
p0320 A73-36535

DRAGOVICH, J. A.
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417

DRAKE, W. O.
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429

DRANE, J. W.
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475

DREHER, B.
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421

DREIFUS, L. S.
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542

DREIFUSS, F. E.
Responsiveness at the onset of spike-wave bursts.
p0156 A73-22695

DREIFUSS, J. J.
Mechanisms of secretion of neurohypophysial hormones - Cellular and subcellular aspects
p0282 A73-32286

DRESSLER, CH.
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873

DREYER, W.
Visual problems among senior flight personnel.
p0329 A73-36924

DRISCOLL, T. E.
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
The medical aspects of space flight seen from the viewpoint of nuclear medicine
p0174 N73-18106

DROZDOVA, N. T.
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516

Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
State of the visual analyzer under hypokinetic conditions
p0255 N73-22014
Effect of vestibular analyzer irritation under hypoxic conditions on some visual analyzer functions
p0263 N73-23040

DRUM, B. A.
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Brightness additivity for a grating target.
p0246 A73-30398

DUBININ, N. P.
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Effects of space flight factors on Drosophila.
p0397 A73-42173

DUBLIN, M.
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478

DUBOIS, P.
New method of stimulation for the study of photoreceptors.
p0237 A73-28362

DUCHOSAL, F.
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523

DUCKMAN, R. H.
Some observations concerning saccadic eye movements.
p0245 A73-30389

DUCLAUX, R.
Thermoregulatory behaviour in Rana esculenta - Effects of spinal cord heating
p0426 A73-43994

DUCROS, H.
The consequences of partial inanition in hot climates
p0125 A73-21248
Atmospheric regeneration in closed chambers by potassium superoxide
p0332 A73-36951

DUDA, F.
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249

DUDANI, N. G.
Study of Indian naval aircrew experiences and psychic factors in disorientation.
p0328 A73-36919

DUDEK, E. A.
Crew performance in extended operation under vibrational stress.
p0082 A73-16717
Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217
Performance, recovery and man-machine effectiveness [AD-750176]
p0103 N73-14107
Work-rest schedules under prolonged vibration with implications to military operations
p0271 N73-23986

DUDEL, J.
Excitation process in heart cells.
p0197 A73-25592

DUDKIN, K. N.
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
Plotting of poststimulus histograms by means of the 'Neuron-1' analyzer
p0165 A73-23811

DUFFY, W. J.
Modeling food preferences over time [AD-749079]
p0102 N73-14100

DUFOUR, D.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540

DUFOUR, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

DUGGER, G.
An evaluation of the effects of bed rest, sleep deprivation and discontinuance of training on the physical fitness of highly trained young men [NASA-CR-134044]
p0438 N73-32008

DUJARDIN, E.
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160

DUKE, M. B.
Lunar sample quarantine procedures - Interaction with non-quarantine experiments.
p0313 A73-35978

DUKES, T. A.
A performance measure for manual control systems
p0601 N73-10135

DUKHIN, E. O.
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940

DULING, B. R.
Microvascular responses to alterations in oxygen tension.
p0581 A73-11010
Changes in microvascular diameter and oxygen tension induced by carbon dioxide.
p0200 A73-26116

DUNCAN, D. C.
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676

DUNLAP, C. E.
Single-cell protein from waste cellulose [NASA-CR-130300]
p0106 N73-15115

DUNN, M.
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891

DUNN, V. B.
Development of design information for molecular-sieve type regenerative CO2-removal systems [NASA-CR-2277]
p0366 N73-27948

DUNSKY, I. L.
Retinal damage thresholds for multiple pulse lasers. [AD-758530]
p0196 A73-25341

DUPIK, V. S.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113

DURAND, J.
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788
Exchange of hand heat. The role of circulatory reactions and variations of the local temperature of arterial bloods [NASA-TT-F-15143]
p0445 N73-33043

DURBECK, D. C.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
Personal benefits of a health evaluation and enhancement program
p0145 N73-17069
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

DURPEE, R. L.
Evaluation of proposed Skylab and SSP soap products. [ASME PAPER 73-ENAS-26]
p0350 A73-37981
Evaluation of proposed Skylab and SSP soap products [NASA-CR-128880]
p0222 N73-20143

DUBLACH, M. I.
Binaural signal detection - Equalization and cancellation theory. p0244 A73-30284
DURNEY, G. P.
Space suit [NASA-CASE-MSC-12609-1] p0439 N73-32012
DURNEY, MR.
Cosmic radiation and research carried out on board the 001 prototype Concorde p0116 A73-19211
DURNOVA, G. N.
Course of the infectious process and functional activity of pulmonary macrophages in mice confined to an atmosphere with a high oxygen content p0442 N73-33016
DUVELLEROY, M. A.
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model. p0433 A73-45060
Response of coronary blood flow to pH-induced changes in hemoglobin-02 affinity. p0433 A73-45061
DUYSENS, J.
Movement perception during voluntary saccadic eye movements. p0308 A73-34845
DVURECHENSKAIA, G. IA.
Effect of prior adaptation to cold on the development of experimental hypertonia p0381 A73-40209
DYER, F. N.
Color naming latencies with brief exposures of individual Stroop and control stimuli [AD-745106] p0596 N73-10094
DYMNIKOVA, L. P.
Afferent connections of the thermoregulation center p0199 A73-26086
DZERGELENOK, I. I.
A diagnostic program - Problems of predicting myocardial infarction on a digital computer p0354 A73-38998
DZHAFAROV, A. I.
Inhibition by selenium of the free-radical states of the retina of the eye p0430 A73-44724
DZHALAGONIIA, SH. L.
Functional alterations in the auditory and visual analysor systems of monkeys during experimental neurosis p0092 A73-18163
Characteristics of the higher nervous activity of monkeys during a postneurotic period p0206 A73-27108
DZHUNUSHEV, M. D.
Time of retention of increased resistance to hypoxia in relation to different patterns of high mountain acclimatization p0255 N73-22006
DZIADZIUSZKO, B.
Meteorological conditions and infection of the upper respiratory tract in children [NLL-M-22866-(5828.4F)] p0297 N73-25109

E

EASTWOOD, D.
A study of marine luminescence signatures, part 1 [NASA-CR-114578] p0297 N73-25114
Compendium of marine luminescence signatures, part 2 (appendix C) [NASA-CR-114579] p0298 N73-25115
EBBERS, R. H.
Retinal damage thresholds for multiple pulse lasers. [AD-758530] p0196 A73-25341
Retinal effects of multiple pulse gallium arsenide laser [AD-753419] p0221 N73-20135
EBENHOLTZ, S. M.
Optimal input rates for tilt adaptation. p0401 A73-42500
EBINA, T.
Multi-information recording and reproduction in the ultrasono-cardio-tomography. p0239 A73-28581
ECHT, M.
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique. p0084 A73-17098
ECKERSON, J. D.
Thermographic evaluation of relative heat loss areas of man during cold water immersion. p0325 A73-36781
ECKERT, P.
Circulation and water balance during immersion in a water bath [NASA-TT-F-14834] p0185 N73-19124
ECKHARDT, L.
Assistance to NASA in biomedical areas of the technology utilization program [NASA-CR-129588] p0068 N73-13071
EDELMAN, I. S.
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion. p0156 A73-22650
EDELMAN, N. H.
Ventilatory responses to transient hypoxia and hypercapnia in man. p0275 A73-31126
EDELWEJN, Z.
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia p0088 A73-17769
EDENBOROUGH, R. A.
Human factors evaluation of labelled radar displays. p0049 A73-14155
EDGE, P. M., JR.
Factors influencing public acceptance of STOL noise p0441 N73-32960
EDMUNDS, L. H., JR.
Distribution of systemic blood flow during cardiopulmonary bypass. p0158 A73-22930
EDWARDS, D. C.
Information processing in the visual periphery. p0304 A73-34150
EDWARDS, E.
Man and machine - Systems for safety. p0303 A73-34078
EDWARDS, J. E.
Pathology of angina pectoris. p0085 A73-17276
EDWARDS, R. G.
Changes in whole body force transmission of dogs exposed repeatedly to vibration. [ASME PAPER 72-WA/BHF-11] p0061 A73-15878
A standard psychophysiological preparation for the study of environmental stress. p0286 A73-33130
Changes in whole body force transmission of dogs exposed repeatedly to vibration. p0355 A73-39106
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration. [ASME PAPER 73-DET-78] p0395 A73-42073
EDWARDS, R. S.
Efficiency in heat after a night without sleep [OES-8/72] p0421 N73-31024
EFIMOV, V. I.
Effect of antiradiation drugs on the functional condition of the vestibular analysor p0279 A73-31509
EGAN, R. G.
Correlation of in situ fluorescence and bioluminescence with Biota in the New York Bight [RM-5683] p0252 N73-21978
EGASHIRA, Y.
Automatic electrocardiogram interpretation system. p0056 A73-14660
EGETH, H.
Factors affecting processing mode in visual search. p0311 A73-35493
EGGSPUEHLER, J. J.
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
Stress and strain in student helicopter pilots. p0386 A73-41155
EGOROV, B. B.
Asymmetry of otolith responses in fish p0279 A73-31507
EGOROV, I. A.
DNA catabolism in rat tissues in response to

transverse accelerations
p0087 A73-17679

EGSTROM, G. H.
Underwater work performance and work tolerance
[AD-747701] p0072 N73-13107

EHSANI, A. A.
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801

EICHERT, E.
A psychophysical study of the HF sound phenomenon
[AD-747684] p0099 N73-14076

EIGEN, M.
Molecular self-organization and the early stages of evolution
p0281 A73-31825

EIJKMAN, E. G. J.
Cat optic tract and geniculate unit responses corresponding to human visual masking effects.
p0586 A73-12161

EINHORN, I. N.
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429

EKSHTEIN, M. E.
Biomedical problems of space flights: Index of domestic and foreign literature
p0062 A73-16034

EKSHTEIN, M. E.
Medical-biological problems of spaceflight: An index to the Russian and foreign literature
[NASA-TT-F-14662] p0265 N73-23053

EKSTRAND, B. R.
Sleep and memory.
p0093 A73-18225

EKSTROM, M. A.
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059

EL-HAWARI, H. A.
Crew performance in extended operation under vibrational stress.
p0082 A73-16717

Optimal work-rest schedules under prolonged vibration.
p0423 A73-43217

Work-rest schedules under prolonged vibration with implications to military operations
p0271 N73-23986

EL-SHERIF, M.
Intermittent trifascicular block - Different mechanisms of conduction disturbances in the bundle branches.
p0115 A73-19152

EL'IASBERG, V. M.
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810

A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663

EL'KINA, G. A.
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569

EL'NER, A. M.
Organization of spontaneous muscular activity in man
p0157 A73-22863

ELBEL, E. R.
The effects of passive or active warm-up upon certain physiological measures.
p0042 A73-13123

ELBER, E.
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932

ELDREDGE, D.
Effects of ancillary information upon photointerpreter performance.
p0093 A73-18245

ELDRIDGE, F. L.
Posthyperventilation breathing - Different effects of active and passive hyperventilation.
p0241 A73-29752

ELECCION, M.
Laser hazards.
p0356 A73-39205

ELFIMOV, A. I.
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840

ELINSKII, N. P.
Lesions of the nervous system in decompression sickness
[AD-743330] p0593 N73-10076

Mute gas bubbles and their role in decompression pathology
[AD-748229] p0108 N73-15126

ELIZARI, M. V.
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523

The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524

ELIZAROV, E. IA.
Mathematical modeling of biological systems
p0150 A73-22347

ELIZONDO, R. S.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059

ELKINS, W.
High pressure space suit glove
[NASA-CR-114535] p0151 N73-17120

ELLESTAD, M. H.
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643

Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802

ELLINGSON, R. J.
Development of wakefulness-sleep cycles and associated EEG patterns in mammals.
p0051 A73-14263

ELLIOTT, D. H.
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782

ELLIOTT, J. A.
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422

ELLIOTT, J. C.
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347

ELLIS, J. P., JR.
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479

ELLIS, P. H.
Perception of symmetrically distributed weight on the head
[AD-748412] p0261 N73-22056

ELLIS, W. L.
Microbial response to space environment, part B
p0232 N73-21762

Infectivity and egg production of Nematospiroides dubius as affected by space flight and ultraviolet irradiation
p0291 N73-24106

ELOVSKAIA, L. T.
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680

ELSNER, H.
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202

ELWOOD, P. C.
Blood group A sub-groups and serum cholesterol.
p0408 A73-43107

EMIRBEKOV, E. Z.
Nitrogen metabolite dynamics in the brain during repeated hypothermia and subsequent spontaneous warming
p0207 A73-27703

Dynamics of nitrogenous cerebral metabolites accompanying multiple hypothermia and subsequent self heating
p0216 N73-20097

ENG, J. P.
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
ENGE, W.
The Biostack experiment on Apollo 16.
p0399 A73-42185
ENGEL, L. A.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Gas mixing during inspiration.
p0323 A73-36652
ENGLISH, R. A.
Thermoluminescent dosimetry for the Apollo 16 microbial response to space environment experiment (M191)
p0292 N73-24115
ENOCH, J. M.
Contrast sensitivity, Westheimer function and Stiles-Crawford effect in a blue cone monochromat.
p0346 A73-37414
ENOS, J. P.
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
ENTENMAN, C.
Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
ENTMAN, M. L.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
EPSHTEIN, E. L.
Effect of some pharmacological preparations on the fall-out nystagmus and Bechterew nystagmus
p0123 A73-20982
EPSHTEIN, I. M.
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
EPSHTEIN, I. M.
Effect of antioxidants on the rate of deoxygenation of blood in animals exposed to a modified atmosphere
p0216 N73-20096
EPSHTEIN, Y. L.
Effect of some drugs on fall-out and Bekhterev nystagmus
p0134 N73-16049
EPSTEIN, D. L.
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
EPSTEIN, E. J.
Phonocardiogram and apex cardiogram in systolic click-late systolic murmur syndrome.
p0199 A73-25698
EPSTEIN, M.
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
Studies of the Renin-aldosterone system and sodium homeostasis during simulated weightlessness: Application of the water immersion model to man
p0174 N73-18110
EPSTEIN, P. E.
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
ERBECK, D.
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
ERDAKOV, S. V.
Energy cost of muscle work in a state of fatique
p0080 A73-16697
EREMIAGIN, A. I.
Cerebral temperature oscillations and vascular responses in man
p0164 A73-23805
EREMIN, G. S.
Some modeling problems of loudness transformations by the auditory system
p0060 A73-15790
A method for experimental examination of hearing
p0432 A73-44910
ERICKSON, H. H.
Myocardial metabolism during exposure to carbon monoxide in the conscious dog.
p0159 A73-22935
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
ERICKSON, H. H.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143
Naval pilot training system study. Volume 2: Appendices A, B, C, and D.
[AD-756639] p0296 N73-24144
Naval pilot training system study. Volume 3: Executive summary
[AD-756640] p0296 N73-24145
ERIKSSON, E. S.
Distance perception and the ambiguity of visual stimulation - A theoretical note.
p0311 A73-35492
ERISTAVI, I. IA.
Some metric characteristics of myocardial cells under various conditions of cardiac and cardiovascular pathology
p0332 A73-36962
EROSHIN, N. S.
Determination of the light status in suspensions of algae
p0378 N73-29325
The theory of photosynthesis of algae
p0378 N73-29326
ERSHOVA, N. K.
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367
ERTANOV, I. D.
DNA catabolism in rat tissues in response to transverse accelerations
p0087 A73-17679
ERTEM, G.
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
ESCOBAR, C.
Support of advanced development objective 43-13, human factors technology
[AD-744984] p0613 N73-11104
ESGAR, J. B.
Ophthalmic liquefaction pump
[NASA-CASE-LEW-12051-1] p0437 N73-32000
ESIPENKO, B. E.
Modeling of water metabolism in the organism
p0166 A73-23941
ESIPOV, I. A.
Prophylaxis and treatment of the motion sickness syndrome
p0240 A73-29410
ESSER, A. F.
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599
ESSMAN, W. B.
Contributions of differential housing to brain development - Some implications for sleep behavior.
p0051 A73-14259
ETHRIDGE, R. A.
Computer simulation of gas exchange in human lungs.
p0278 A73-31348
ETINGOF, R. M.
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and p-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
ETTINGER, H. J.
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.

p0383 A73-40408

EVANICH, M. J.
A frequency response analysis of fusimotor-driven muscle spindles.
p0158 A73-22934
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780

EVANS, B. T.
A remotely operated ECG telemeter for chronic implantation in rats.
p0054 A73-14303

EVANS, S. H.
Some aspects of individual differences in schematic concept formation
[AD-744781] p0260 N73-22052

EVDOKIMOV, S. A.
Investigation of evoked activity in the ventral horn of lumbar segments during the interaction of efferent extrapyramidal and cortical stimuli
p0156 A73-22579

EVERING, F. C., JR.
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482

EVERY, M. G.
Habitability issues in long duration undersea and space missions
[NASA-CR-130537] p0151 N73-17123
A review of problems encountered in the recovery of navy aircrewmen under combat conditions
[AD-761636] p0370 N73-27972

EVHARD, G.
Determination of lesion threshold in the guinea pig auditory area due to sonic boom
[ISL-33/72] p0369 N73-27966

EVREINOVA, T. N.
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951

EVSTAF'EV, B. V.
Special physical training of pilots as a prophylactic measure against obesity
p0277 A73-31172

EVWARD, J. C.
Ophthalmic method and apparatus
[NASA-CASE-LEW-11669-1] p0339 N73-27062

EWING, C. L.
Human head and neck response to impact acceleration
[AD-747988] p0072 N73-13106
Non-fatal ejection vertebral fracture and its prevention
p0265 N73-23059

F

FABIAN, J.
A simple cardiac contractility computer.
p0403 A73-42677

FABRIKANT, J. I.
Environmental radioactivity: Radiation effects at the cellular level
[NYO-3970-29] p0099 N73-14074

FACEY, R. A.
Relationships between dosimeter response and absorbed dose for 0.66-MeV gamma rays and for 2.9-MeV neutrons
[AD-743005] p0593 N73-10077

FACIUS, R.
The Biostack experiment on Apollo 16.
p0399 A73-42185

FADEEVA, O. N.
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394
Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661

FAELLI, A.
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623

FAGRAEUS, L.
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132

FAIRCHILD, M. D.
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
Effects of hydrazine on electrophysiology, behavior and runway performance in the cat
[AD-746014] p0609 N73-11081
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses
[AD-746302] p0610 N73-11082

FAIRCHILD, T. H.
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723

FAITEL'BERG-BLANK, V. R.
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint
p0166 A73-23943

FALEYEVA, V. N.
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109

FAN, L. T.
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225

FANARDZHIAN, V. V.
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515

FANI, K.
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805

FANTALOVA, V. L.
Characteristics of vasomotor alterations during brief arbitrary hyperventilation according to data from rheographic and plethysmographic studies
p0193 A73-25041

FANTINO, M.
Thermoregulatory behaviour in Rana esculenta - Effects of spinal cord heating
p0426 A73-43994

FANTUZZO, D.
Automatic recognition of electrocardiographic patterns
p0308 A73-34964
Automatic cataloging of electrocardiographic patterns
p0309 A73-34965

FARBER, IU. V.
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169

FARBER, Y. V.
Vestibular reactions methods of study and the effects on various environmental factors
[AD-753511] p0220 N73-20132

FARHI, L. E.
Absorption of gas bubbles in flowing blood.
p0400 A73-42414

FARMER, F. H.
An investigation of a sterile access technique for the repair and adjustment of sterile spacecraft
[NASA-TM-D-7147] p0151 N73-17122

FATONE, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

FAULKNER, T. W.
Lighting for difficult visual tasks.
p0247 A73-30498

FAVERO, M. S.
Monitoring for microbial flora.
p0288 A73-33698
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration
[NASA-CR-129513] p0065 N73-12100
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration

[NASA-CR-131086] p0185 N73-19123
Services provided in support of the planetary quarantine requirements
[NASA-CR-132022] p0265 N73-23056
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration
[NASA-CR-133742] p0411 N73-30064

FAVORITE, F. G.
Guides for short-term exposures of the public to air pollutants
[AD-751438] p0139 N73-16084
Basis for establishing guides for short term exposure of the public to air pollutants
[AD-751437] p0140 N73-16088

FAVRE, H.
Human calorimeter with a new type of gradient layer.
p0324 A73-36662

FEDORENKO, B. S.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182

FEDOROV, I. V.
Protein and nucleic acid contents in animal tissues under hypokinesia
p0279 A73-31503
Content of protein and nucleic acids in the tissues of animals during hypokinesia
p0262 N73-23027

FEDOROV, Y. K.
Problems of man's interaction with his natural environment
[JPRS-58113] p0151 N73-17121

FEDOROVA, N. L.
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphological changes in the testes of dogs accompanying chronic and combined gamma irradiation
p0134 N73-16048

FEDOROVA, N. S.
Dependence of visual acuity on background brightness
p0306 A73-34639

FEDOTCHEV, A. I.
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

FEDOTOVA, T. V.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113

FEDYAYEV, B. P.
Virucidal action of hydrogen peroxide aerosols in decontamination of air in an influenza nidus
[NASA-TT-F-15127] p0438 N73-32006

FEIGENBAUM, H.
Newer aspects of echocardiography.
p0243 A73-30053
Echocardiography.
p0245 A73-30358
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869

FEINGOLD, H. S.
Heart rates and predicted maximal oxygen uptake following training at low to moderate duration and intensity
p0371 N73-29020

FEINSTEIN, S.
The contribution of the external auditory meatus to human auditory sensitivity
[AD-751664] p0177 N73-18132

FEL'DMAN, L. A.
Evaluation of the physical conditions of individual airmen
p0425 A73-43790

FELDERHOF, C. H.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860

FELDMAN, G. L.
Electrophysiological indices of sleep in the cerebral cortex
p0257 N73-22026

FELL, S. B.
The use of telemetry to obtain physiological data during exercise.
p0052 A73-14278

FELTON, J. S.
Sensitivity to emotional ill health
p0144 N73-17062

FENDER, D. H.
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959

FENNESSY, P.
Emotional and cardiovascular stresses of centrifugation: Effect of beta receptor blockade on heart rate response
p0188 N73-19149

FENTON, T. R.
Measuring characteristics of the displacement cardiograph.
p0403 A73-42676

FERGUSON, J. C.
A new approach to criterion development in the replacement air group
[AD-748195] p0104 N73-14111

FERNANDEZ, G.
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012

FERNSTROM, J. D.
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408

FERRANS, V. J.
Localizing factors in experimental atherosclerosis.
p0320 A73-36536

FERRELL, D. W.
An 8-channel, ultrasonic, marine bio-telemetry transmitter utlizing C/MOS (Complementary Metal-Oxide Semiconductor) digital integrated circuits
[AD-748605] p0074 N73-13119

FERRER, M. I.
The sick sinus syndrome.
p0201 A73-26289

FERRIS, S. H.
Apparent object movement produced by head movement under water
[AD-749319] p0101 N73-14086
Improving absolute distance estimation in clear and in turbid water
[AD-752976] p0187 N73-19140
Improving distance estimation under water: Long-term effectiveness of training
[AD-752979] p0299 N73-25128
Handedness and adaptation to distortions of size and distance under water
[AD-759722] p0337 N73-26098

FESTINGER, L.
Some observations concerning saccadic eye movements.
p0245 A73-30389

FETSKE, W.
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071

FETIN, I. N.
Advanced methods of recovery for space life support systems.
p0347 A73-37711

FIASSON, J. L.
The carotenoids of some Basidiomycetes: A chemiotaxionomic survey
[NASA-TT-F-14858] p0219 N73-20117

FICHTBAUER, S.
Relations between sociometric variables and criteria of proficiency or behavior of student pilots
p0367 N73-27954

FIELD, D.
A new portable temperature-sensing device.
p0169 A73-24567

FIELD, S.
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001

FILATKINA, L. A.
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion

p0184 N73-19111

FILIMONOVA, T. D.
The form of the 'expectancy' wave and the psychic state in man
p0363 A73-39804

FILIN, V. A.
Involuntary eye movements in the presence and absence of points
p0322 A73-36568

FILION, M.
Light adaptation of the late receptor potential in the cat retina.
p0236 A73-28352

FILLEY, G. F.
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610

Pulmonary gas transport and the regulation of ventilation at rest and exercise
[AD-746979]
p0071 N73-13092

FINAGIN, L. K.
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284

FINDLAY, J. M.
Feature detectors and vernier acuity.
p0120 A73-20159

FINE, J.
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100

FINE, M. M.
Acoustic-optical detection of decompression sickness in hamsters
[AD-743475]
p0595 N73-10091

FINEMAN, M. B.
A comparison of the Ponzo illusion with a textural analogue.
p0388 A73-41180

FINLEY, D. L.
Training effectiveness evaluation of naval training devices. Part 1: A study of the effectiveness of a carrier air traffic control center training device
[AD-751556]
p0141 N73-16101

FINOGENOV, A. M.
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694

Prolonged monitoring of human cardiac bioelectric activity during ground experiments and in space flight
p0065 N73-12095

FIORENTINI, A.
Contrast in night vision.
p0046 A73-13759

The visual cortex as a spatial frequency analyser.
p0308 A73-34840

FIORENTINI, C.
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015

FIRSTENBERG, A.
Physiology of chimpanzees in orbit. Part 1: Scientific Report
[NASA-CR-131374]
p0220 N73-20129

Physiology of chimpanzees in orbit. Part 2: Interface document
[NASA-CR-131397]
p0220 N73-20130

FISCH, P. A.
Psychological factors influencing the relationship between cardiac arrhythmia and mental load.
p0250 A73-30877

FISCH, C.
Relation of electrolyte disturbances to cardiac arrhythmias.
p0131 A73-21807

Electrocardiographic diagnosis of myocardial infarction - Pitfalls of a graphic technique.
p0321 A73-36544

FISCHER, C. L.
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794

Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795

FISCHER, F.
Renin-angiotensin system in simulated hypervolemia induced by immersion
[NASA-TT-F-14885]
p0258 N73-22036

FISCHER, G. L.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565

FISHER, A. B.
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134

FISHER, F. D.
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051

FISHER, R. P.
Multi-task time-sharing requirements
[AD-755363]
p0269 N73-23088

FISHMAN, A. P.
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540

Clinical manifestations of acute myocardial infarction.
p0321 A73-36543

FITCH, P.
Signal/noise ratio in the recording of human nerve-action potentials.
p0399 A73-42372

FITZGERALD, J. A.
Evaluation of airborne audio-video recordings as a tool for training in the A-7D tactical fighter
[AD-744041]
p0605 N73-10161

FITZGERALD, J. D.
The pharmacology of practolol - A cardioselective beta adrenergic blocking drug.
p0153 A73-21850

FITZGERALD, J. G.
The incidence of backache among aircrew and groundcrew in the Royal Air Force
[AD-745177]
p0597 N73-10102

FITZGERALD, J. M.
Visual examination apparatus
[NASA-CASE-ARC-10329-1]
p0335 N73-26072

FIXLER, D. E.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661

FLAHERTY, J. T.
Localizing factors in experimental atherosclerosis.
p0320 A73-36536

FLECK, H. L.
Dynamic EKG study
p0144 N73-17065

Normally expected aberrations in the 8-hour dynamic EKG
p0145 N73-17066

Coronary risk factor scoring as a guide for counseling
p0146 N73-17080

FLEISCHER, R. L.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150

FLEISS, J. L.
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991

FLETCHER, J. L.
Conventional and high frequency hearing of naval aircrewmen as a function of noise exposure.
p0425 A73-43500

FLINK, J. M.
Mechanisms of deterioration of nutrients phase 1
[NASA-CR-128915]
p0269 N73-23085

FLOCK, H. R.
Brightness functions for a complex field with changing illumination and background.
p0235 A73-28100

FLOOR, V.
Submaximal exercise with increased inspiratory

resistance to breathing.
p0400 A73-42419

FLORENSOVA, K. N.
Virucidal action of hydrogen peroxide aerosols in decontamination of air in an influenza nidus
[NASA-TT-F-15127] p0438 N73-32006

FLORENTIN, E.
Recording of second time derivative of displaced volume V in breathing.
p0159 A73-22937

FLOREKIN, E.
Trypsinogen activation peptides - An example of molecular epigenesis.
p0091 A73-17947

FLOROV , O. K.
Universal transistorized stimulator with external control
p0084 A73-16739

FLORY, D.
Organic analysis of lunar samples and the Martian surface.
p0396 A73-42163

FLOWERS, N. C.
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Diagnostic power of the Q wave - Critical assay of its significance in both detection and localization of myocardial deficit.
p0319 A73-36527
Mid- and late changes in the QRS complex.
p0320 A73-36528

FLOYD, W.
The role of ammonia in the metabolic effects of hydrazine
[AD-749519] p0100 N73-14077

FLOYD, W. W.
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335

FLYNN, E. T.
Influence of increased ambient pressure and gas density on cardiac rate in man
[AD-755129] p0261 N73-22058

FOEHR, R.
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880

FOFANOV, V. I.
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Effect of protein quality in the ration of rats on their tolerance of acute hypoxia
p0263 N73-23035

FOGEL, M. E.
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789

FOLK, E. D.
GPSS/360 computer models to simulate aircraft passenger emergency evacuation
[FAA-AM-72-30] p0150 N73-17119

FOLLENIUS, M.
Diurnal variations of plasma cortisol and glucose and of urinary excretion of free cortisol in man at rest
p0434 A73-45158
The effects of muscular exercise on urinary excretions of adrenal harmones in the normal man
[NASA-TT-F-15046] p0374 N73-29043

FOMENKO, B. S.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180

FONICHEVA, E. E.
Formation of various functional states in the symmetrical structures of the brain as a function of the intensity of unconditioned excitation
p0362 A73-39801

FONIN, E. A.
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167

FONAR'OV, A. B.
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513

FONTAN, M.
Apparent plasma hyperosmolality in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079

FONTENELLE, F.
The significance of pendulum nystagmography in aviation medicine
p0330 A73-36941

FORD, G. E.
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824

FORET, J.
Does one sleep to forget or to remember
p0280 A73-31749

FORGAYS, D. G.
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482

FORNIN, V. S.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning
p0182 N73-19095

FORSTER, H. V.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Time course of respiratory adaptation to high altitude
[AD-755192] p0267 N73-23075

FOSTER, E. G.
Microbial response to space environment, part B
p0232 N73-21762
Effect of solar irradiation on extracellular enzymes of Aeromonas proteolytica
p0292 N73-24111

FOSTER, R. R.
The effect of continuous low dose-rate gamma irradiation on cell population kinetics of lymphoid tissue
[NASA-CR-135723] p0437 N73-31999

FOSTER, P. G.
Rapid eye movement analyzer.
p0156 A73-22697

FOSTER, T. L.
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission
[NASA-CR-130009] p0135 N73-16059
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission, 1 January - 30 June 1973
[REPT-2] p0333 N73-26063

FOWLER, N. J.
Sleep and memory.
p0093 A73-18225

FOWLER, N. O.
Clinical diagnosis.
p0085 A73-17277
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891

FOX, E. L.
Steady-state equality of respiratory gaseous N2 in resting man.
p0324 A73-36660
Oxygen kinetics for constant work loads at various altitudes.
p0433 A73-45062

FOX, J. L.
Origins.
p0089 A73-17928

FOX, R.-J.
Effect of eye movements on backward masking and perceived location.
p0388 A73-41184

FOX, R.
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645

The psychophysical inquiry into binocular summation.
p0388 A73-41187

FOX, R. F.
A non-equilibrium thermodynamical analysis of the origin of life.
p0090 A73-17931

FOX, S. W., III
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

FOX, S. W.
Evolution from amino acids - Lunar occurrence of their precursors.
p0578 A73-10249
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Amino acid precursors in lunar samples.
p0095 A73-18421
Molecular evolution and the origin of life.
p0205 A73-27049

FOX, T. O.
Evolution of levels of evolution.
p0090 A73-17929

FOZZARD, H. A.
The membrane capacitance of heart cells.
p0197 A73-25596

FRANCIS, J. E.
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053

FRANCK, J.-B.
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067

FRANCO, M. J.
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780

FRANCOIS, A.
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211

FRANCOIS, H.
The Biostack experiment on Apollo 16.
p0399 A73-42185

FRANK-KAMENETSKII, M. D.
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637

FRANK, C. W.
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288

FRANK, G. H.
Methods and technique of machine analysis of biological structures
[JPRS-57418] p0070 N73-13085

FRANKE, E.
Influence of pressure rise time of an N shock wave, simulating the sonic boom on the cochlear and acoustically evoked potentials of the guinea pig
[ISL-31/72] p0365 N73-27940
Determination of lesion threshold in the guinea pig auditory area due to sonic boom
[ISL-33/72] p0369 N73-27966

FRANKSHTEIN, S. I.
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677

FRANZINI, C.
On the functional significance of subcortical single unit activity during sleep.
p0242 A73-29993

FRASER, D. B.
The complications of coronary arteriography.
p0399 A73-42343

FRASER, T. M.
Sustained linear acceleration
p0105 N73-15095
Rotary acceleration
p0105 N73-15096

FRAZER, J. W.
Cytologic aspect of RF radiation in the monkey, part 1
[AD-749583] p0108 N73-15128

FRAZIER, J. W.
Performance of the anti-G valve when subjected to varying lateral forces
[AD-760814] p0377 N73-29062

FRAZIER, T. W.
Use of spectral analysis procedures for the evaluation of drug effects
p0228 N73-21116

FREARSON, D. E.
Man-machine considerations in the development of a cockpit for an advanced tactical fighter
p0270 N73-23905

FREEDY, A.
Interactive aspects of man/learning system control teams.
p0081 A73-16708
Man/machine interaction in adaptive computer aided control initial study
[AD-754835] p0222 N73-20147

FREEMAN, A. R.
Modification and updating of the bioelectric BS2C amplifier for a PET input.
p0159 A73-22936
Intracellular measurements in a closed hyperbaric chamber.
p0434 A73-45072

FREEMAN, R. B., JR.
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450

FREEMAN, R. D.
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371

FREGLY, A. R.
Sweat sensor for qualitative measurements.
p0050 A73-14160
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet simulated
[AD-748192] p0103 N73-14105

FRENCH, J. R. P., JR.
Psychosocial factors in coronary heart disease
p0143 N73-17054

FRENCH, R. L.
Initial radiation exposure from nuclear weapons
[AD-745906] p0610 N73-11084

FREUND, H.
On table salt fever
[NASA-TT-F-14677] p0136 N73-16063

FREY, A. H.
A psychophysical study of the RF sound phenomenon
[AD-747684] p0099 N73-14076

FREY, J.
Biophysical hazards of microwave radiation.
p0285 A73-32723

FREYDMAN, S. L.
Characteristics of the action of medicinal preparations under hypothermic conditions
p0212 N73-20064

FRICKSON, J. D.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064

FRIDEN, T. P.
Whiteness constancy - Inference or insensitivity.
p0388 A73-41183

FRIEDBERG, C. K.
The early diagnosis of coronary heart disease - Critical review.
p0404 A73-42827

FRIEDMAN, D.
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991

FRIEDMAN, H.
Simultaneous motor and verbal processing of visual information in a modified Stroop test.

p0153 A73-21896

FRIEDMAN, S. M.
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510

FRIESINGER, G. C.
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris.
p0085 A73-17279
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856

FRISANCHO, A. R.
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928

FRISBY, J. P.
Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514

FRITH, C. H.
Cardiopulmonary responses of male and female swine to simulated high altitude.
p0432 A73-45058

FRITZHAND, M. D.
Toxicology of atmospheric sulfur dioxide decay products
p0099 N73-14071

FROEHLICH, G.
The frequency of barotraumas as determined by nasal findings and X-rays of the paranasal sinuses
p0409 A73-43132

FROHLICHER, V. F., JR.
Prevention of the atherosclerotic diseases - Opportunities for military medicine.
p0248 A73-30518
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342

FROGGATT, G.
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469

FROLKIS, I. V.
Influence of ribonuclease on changes in the membrane potential of muscle fibers evoked by stimulation of the sympathetic nerve
p0276 A73-31166

FROLOV, M. V.
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329

FROLOV, M.
Using onboard records for medical purposes
p0416 N73-30986

FROST, D.
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218

FROST, H.
Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208

FROST, J. D., JR.
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464

FRUEND, E.
Sixty ambulatory patients treated with Salvarsan
[NASA-TT-F-14618] p0609 N73-11076

FRY, D. L.
Localizing factors in experimental atherosclerosis.
p0320 A73-36536
Localizing factors in arteriosclerosis.
p0320 A73-36537

FRYER, T. B.
A multichannel electromagnetic flowmeter telemetry system.
p0052 A73-14283
Single and multichannel implanted telemetry systems.
p0054 A73-14302
A narrowband, crystal controlled biomedical telemetry system.
p0162 A73-23381
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Miniature ingestible telemeter devices to measure deep body temperature
[NASA-CASE-ARC-10583-1] p0101 N73-14093

FU, K.
Engineering Foundation Conference on Pattern Information Processing
[PB-214617/3] p0294 N73-24129

FUCHEX, DR.
Retinal arterial pressure - Orthostatic hypotension and fatigue /Preliminary study/
p0586 A73-12156

FUCHS, A. F.
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434

FUCHS, H. S.
The use of medication and drugs in flying personnel
[AGARD-CP-108] p0226 N73-21102
Technical evaluation report, conclusion, recommendations
p0226 N73-21103

FUFIN, V. I.
Some dactyloscopic indications of congenital vitium cordis
p0581 A73-11080

FUJIHARA, Y.
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656

FULGHAM, D. D.
Human receptive field characteristics - Probe analysis of stabilized images.
p0120 A73-20252

FULLER, C. E.
Applications of remote sensing in public health.
p0363 A73-39866

FULLER, H. V.
An investigation of a sterile access technique for the repair and adjustment of sterile spacecraft
[NASA-TM-D-7147] p0151 N73-17122

FUNG, Y. C.
Properties of biological fluids and solids: Mechanics of tissues and organs; Proceedings of the Biomechanics Symposium, Georgia Institute of Technology, Atlanta, Ga., June 20-22, 1973.
p0315 A73-36428

FUNG, Y.-C.
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064

FUNTOVA, I. I.
The recording of cardiac rhythms on a magnetic tape for later computer input analysis
[AD-748105] p0075 N73-13124

FUORTES, M. G. F.
Physiology of photoreceptor organs.
p0160 A73-23301
Generator potentials in invertebrate photoreceptors.
p0160 A73-23307
Responses to single photons.
p0160 A73-23308

FURBY, D. E.
Incidence and severity of altitude decompression sickness in Navy hospital corpsmen.
p0238 A73-28511

FURTSEVA, L. M.
Methods of determination of hydroxyproline in biological fluids and their use in clinical practice
[NASA-TT-F-15093] p0417 N73-30997

FURUKAWA, T.
Technical improvements in radiotelemetering of the electrocardiogram.
p0053 A73-14293

FUST, H. D.
A new method to salvage sunken ships and to work underwater in great depth
p0367 N73-27955

G

GABDRAKHMANOV, R. SH.
Role of the medial area of the medulla oblongata

in the rhythmical activity of respiratory-center neurons
p0164 A73-23804

GABEL, R.
Helicopter crew/passenger vibration sensitivity -
p0591 N73-10019

GABRIEL, M.
Contribution to the chemical taxonomy of the Agaricales pigments of Boletus and Cortinaria
[NASA-TT-F-14865] p0219 N73-20124

GACEK, R. R.
Neuroanatomy of the auditory system.
p0244 A73-30280

GAERTNER, K.
A proposal for preprocessing, reduction, and selection of visual information in airborne flight simulation
p0600 N73-10128

GAEVSKII, V. I.
Formalization of certain functional aspects of the external respiration system
p0580 A73-10657

GAFFRON, H.
Variable photosynthetic units, energy transfer and light-induced evolution of hydrogen in algae and bacteria.
p0130 A73-21685

Research in photobiology and photochemistry
[NASA-CR-133459] p0365 N73-27937

GAGE, H.
The effects of physical fatigue on sequencing in eye-hand coordination performance
p0446 N73-33051

GAGNON, R. A.
Applications of a model of the human visual system to pattern recognition problems.
p0309 A73-35242

GAIDADYNOV, V. B.
Advanced methods of recovery for space life support systems.
p0347 A73-37711

GAIDAMAKIN, N. A.
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090

GAIDUK, V. I.
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096

GAKHOV, M. IA.
Y-chromosome localization in the interphase nuclei of cerebral neurons in man
p0582 A73-11444

GALAKTIONOVA, G. V.
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510

Effect of permanent magnetic fields up to 4500 oe on the mitotic activity of corneal epithelial cells in mice
p0263 N73-23030

GALAMBOS, R.
Loudness enhancement following contralateral stimulation.
p0581 A73-10827

GALANTER, E.
Range and time estimates of dynamic visual target
[AD-747271] p0071 N73-13094

GALBAN, P.
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945

GALKINA, T. B.
Studies of the stability of the chemical composition of a chlorella biomass during its prolonged cultivation with recovery of the medium on nitrates
p0184 N73-19108

GALLAGHER, J. J.
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843

GALLAGHER, J. R.
Hazard evaluation of a gallium arsenide diode array laser
[AD-762277] p0370 N73-27975

GALLENSTEIN, J.
Analysis of swimming motions.
p0194 A73-25184

GALOIAN, A. A.
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769

GALUBINSKA, K.
Periods of development and trends in space psychology
p0089 A73-17775

GAMBARIAN, L. S.
Central-peripheral mechanisms of motor functions
p0194 A73-25200

GAMBERALE, F.
Perceived exertion, heart rate, oxygen uptake and blood lactate in different work operations.
p0045 A73-13698

GAMDELSMAN, A. B.
Synchronism and heterochronism of synkinesis in man
p0336 N73-26089

GANGULI, H. C.
Human factor aspects of aircraft noise.
p0206 A73-27450

GANNON, R. P.
Frequency content of nystagmus.
p0237 A73-28502

GANZHA, B. L.
High-frequency synchronized activity of the amygdaloid complex as an EEG indicator of certain psychophysiological states
p0382 A73-40277

GAPRINDASHVILI, KH. I.
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657

GARCIA-ARCE, H.
Mitotic activity in dorsal epidermis of Rana pipiens.
p0122 A73-20456

GARCIA, C. A.
Some engineering aspects of clinical electroretinography.
p0310 A73-35359

GARCIA, G. S., JR.
SERAT atmosphere trace contaminants.
[ASME PAPER 73-ENAS-45] p0351 A73-37992

GARDLIN, G. R.
Degradation of learned skills. A review and annotated bibliography
[NASA-CR-128611] p0603 N73-10152

GARDNER, G. W.
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461

GARDNER, J. A.
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214

GARDNER, M. B.
Problem of localization in the median plane - Effect of pinnae cavity occlusion.
p0193 A73-24976

GARDNER, R. L.
Study of methods for the improvement of bacterial transport media
[NASA-CR-128958] p0297 N73-25113

GARDNER, R. S.
Problem of localization in the median plane - Effect of pinnae cavity occlusion.
p0193 A73-24976

GARINTHER, G. R.
Noise and blast
p0106 N73-15106

GARNER, J. D.
GPSS/360 computer models to simulate aircraft passenger emergency evacuation
[FAA-AM-72-30] p0150 N73-17119

GARRETT, H. L.
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540

GARST, D. M.
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696

GARTLAN, J. L., JR.
Left ventricular blood flow velocity in man

studied with the Doppler ultrasonic flowmeter.
p0159 A73-23173
GARVEY, C. F.
Automated three-dimensional dendrite tracking system.
p0359 A73-39763
GARVIN, L. E.
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134
GARZA, G. G.
Ocular effects of repetitive laser pulses [AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria [AD-746793] p0071 N73-13097
GASANOV, U. G.
Functional properties of auditory cortex neurons in a controlled experiment
p0362 A73-39802
GASAWAY, D. C.
Middle-ear muscle reflex to aircraft noise [AD-764739] p0446 N73-33048
GATTI, E.
An instrument with 240 probes for mapping the cardiac potential
p0167 A73-24422
GAU, G. T.
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
GAUER, O. H.
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098
Circulation and water balance during immersion in a water bath [NASA-TT-F-14834] p0185 N73-19124
GAULT, J. H.
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870
GAUSE, R. L.
Ergometer [NASA-CASE-MFS-21109-1] p0366 N73-27941
Tilting table for ergometer and for other biomedical devices [NASA-CASE-MFS-21010-1] p0413 N73-30078
GAUSSIN, J.
Observers detecting a signal in two multiple observation tasks.
p0578 A73-10350
GAUTHIER, P.
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917
GAUTIER, H.
Control of the duration of expiration.
p0391 A73-41635
GAUZEL'MAN, V. E.
Recording and discrimination of pulsed neuron activity responses to stimulus application and removal
p0047 A73-13823
GAVIN, W. E.
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
GAVRILOV, L. R.
Investigation of cutaneous sensibility by focused ultrasound
p0080 A73-16695
GAYDAMAKIN, N. A.
Influence of radioprotective preparations from the mercaptoalkylamine group (cystamine, S,beta-aminoethylisothiuronium) on the resistance of animals to transversely directed overloads
p0211 N73-20055
The mechanism of reduced ability to withstand overloads under the influence of radio-protective pharmacological substances
p0211 N73-20058
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role of partial shielding in the attenuation of radiation damage
p0214 N73-20076
Significance of radiosensitivity of individual parts of the body in the development of radiation pathology
p0214 N73-20077
Influence of pharmacochemical substances on the reactivity of the organism to the combined action of gamma radiation and transverse overloads
p0215 N73-20086
Method of combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090
GAZDAGH, I.
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586
GAZENKO, O. G.
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness [NASA-TT-F-14624] p0592 N73-10072
Space biology and medicine, volume 6, no. 5, 1972 [JPRS-57517] p0063 N73-12076
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization [NASA-TT-F-720] p0220 N73-20128
Some properties of a mathematical analog of the central portion of a vestibular analyzer [NASA-TT-F-15130] p0420 N73-31015
Space Biology and Medicine, volume 7, no. 4, 1973 [JPRS-60248] p0441 N73-33014
GEBBEN, V. D.
Cardiac R-wave detector with automatic sensitivity control [NASA-TM-D-7152] p0112 N73-15158
Circuit for detecting initial systole and dicrotic notch [NASA-CASE-LEW-11581-1] p0178 N73-18139
GEBERT, G.
An implantable glass electrode used for pH measurement in working skeletal muscle.
p0127 A73-21510
GEDDES, L. A.
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
The specific resistance of blood at body temperature.
p0402 A73-42670
GEHRING, D.
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760
GEKKMAN, B. I.
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
GEL'MAN, B. L.
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions
p0087 A73-17689
GELL, C. F.
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471
GELLY, R.
Possibility of predicting predisposition of motion sickness in the selection of pilots
p0225 N73-21094
GELMAN, B. L.
Cardiovascular system reactions in pilots with symptoms of atherosclerosis during professional work
p0064 N73-12090
GENBITSKII, E. V.
Effects of exposure to microwave fields
p0093 A73-18256
GENNE, G.
Optical properties of the compound eye.
p0161 A73-23310

GENIN, A. M.
Physiological criteria of early toxic normobaric hyperoxia manifestations p0304 A73-34123
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances p0305 A73-34231
Thirty day experiment with simulation of the physiological effects of weightlessness p0255 N73-22010
Search for effective regimes for desaturation of the human body for preventing high-altitude decompression disorders p0372 N73-29029
GENIS, E. D.
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects p0170 A73-24597
GEORGE, M. E.
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys [AD-751232] p0140 N73-16092
GEORGESON, M. A.
Spatial frequency selectivity of a visual tilt illusion. p0392 A73-41642
GEORGIEVSKII, V. S.
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity p0588 A73-12467
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia p0124 A73-20985
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work. p0284 A73-32617
GEORGIYEVSKIY, V. S.
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia p0134 N73-16052
Functional disturbances during hypokinesia in man [NASA-TT-P-15148] p0450 N73-33073
GERASIMENKO, V. M.
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays p0280 A73-31517
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays p0263 N73-23041
GERBER, G.
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin. p0241 A73-29850
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes. p0386 A73-41139
GERBERT, K.
Clinical aviation psychology p0408 A73-43129
Some critical comments on the measurement of in-flight strains p0188 N73-19148
GERBHARDT, L. K.
Distribution of the human average movement potential. p0242 A73-29990
GERKE, R.
Oxygen kinetics for constant work loads at various altitudes. p0433 A73-45062
GERKE, R. J.
Effects of ethyl alcohol on pilot performance. p0237 A73-28501
Studies of pilot performance. III - Validation of objective performance measures for rotary-wing aircraft. p0386 A73-41154
Stress and strain in student helicopter pilots. p0386 A73-41155
Ethyl alcohol and pilot performance: Military implications of in-flight studies p0227 N73-21113
GERLI, G. C.
Oxygen affinity and electrolyte distribution of human blood - Changes induced by propranolol. p0429 A73-44689
GERMANN, E. H.
Digital temperature-measuring device for medical applications p0236 A73-28338
GERMANTON, D.
Implantable transducer for in vivo measurement of bone strain. p0206 A73-27443
GERNARD, M.
Biological effects of titanium [ORNL-TIP/TIRC-72-65] p0186 N73-19135
Toxicity and biological effects of aluminum in animals [ORNL-TIP/TIRC-72-76] p0187 N73-19136
GERRITS, H. J. M.
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship. p0586 A73-12162
Eye movements necessary for continuous perception during stabilization of retinal images. p0318 A73-36461
GERSCH, W.
Status and prospects of EEG spectral analysis. p0058 A73-15278
GERSHUNI, G. V.
Investigation of cutaneous sensibility by focused ultrasound p0080 A73-16695
GETMAN, F. F.
Modification of the electroencephalograph 4EEG-1 for polygraphy p0154 A73-22370
GEUDEY, F. E.
Response of semicircular canal dependent units in vestibular nuclei to rotation of a linear acceleration vector without angular acceleration [AMRU-R-70-4] p0607 N73-11061
GEWECKE, H.
Drug use and performance p0228 N73-21115
GHISTA, D. N.
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization. p0287 A73-33161
GIANNOPOULOS, C. E.
Management of asymptomatic carriers of Hepatitis-Associated-Antigen (HAA) in Hellenic Air Force personnel p0265 N73-23060
GIBB, J. W.
Space Shuttle Orbiter ECLSS. [ASME PAPER 73-ENAS-23] p0350 A73-37979
GIBBERT, A. P.
Possibility of predicting predisposition of motion sickness in the selection of pilots p0225 N73-21094
GIBINSKI, K.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands. p0348 A73-37757
GIBSON , J. A. B.
Megarad plastic film dosimeter. p0427 A73-44212
GIBSON, D. G.
Estimation of left ventricular size by echocardiography. p0159 A73-22999
GIBSON, E. K., JR.
Compounds of the organogenic elements in Apollo 11 and 12 lunar samples - A review. p0095 A73-18418
GIBSON, G. L. M.
Retinal damage from repeated subthreshold exposures using a ruby laser photocoagulator. p0238 A73-28508
GIBSON, R. S.
Effects of part-whole training procedures upon the acquisition of complex skills to be performed under stress p0189 N73-19153
A limited review of the effect of cigarette smoking on performance with emphasis on aviation [AD-754421] p0267 N73-23071
GIDEON, W. P.
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.

p0247 A73-30517

GIEC, L.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757

GILINSKII, V. I.
The question of ground training of flying personnel [AD-749621] p0113 N73-15168

GILLBERG, M.
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213

GILMORE, G.
Factors affecting processing mode in visual search.
p0311 A73-35493

GILSON, R. D.
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485

Alcohol and disorientation related responses. 6: Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about the yaw and pitch axes [FAA-AM-72-34] p0416 N73-30989

GINESTET, A.
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331

GINSBURG, A. P.
Pattern recognition techniques suggested from psychological correlates of a model of the human visual system.
p0309 A73-35241

GIORA, Z.
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179

GIPPENREITER, E. B.
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925

GISOLFI, C. V.
Work-heat tolerance derived from interval training.
p0400 A73-42416

GIU, D. K.
Psychotechnical selection of flight crews in South Vietnam
p0328 A73-36918

GIVONI, B.
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931

GLAISTER, D. H.
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128

Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129

Emotional and cardiovascular stresses of centrifugation: Effect of beta receptor blockade on heart rate response
p0188 N73-19149

GLANCY, D. L.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797

GLANTZ, R.
Spatial integration in the crustacean visual system - Peripheral and central sources of non-linear summation.
p0406 A73-42956

GLASER, Z. R.
Bibliography of reported biological phenomena 'effects' and clinical manifestations attributed to microwave and radio-frequency radiation [AD-750271] p0108 N73-15131

GLASS, R. A.
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567

GLAZ, O. B.
Application of the perceptron to the classification of objects according to random features
p0119 A73-20047

GLAZKOVA, V. A.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123

Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231

Search for effective regimes for desaturation of the human body for preventing high-altitude decompression disorders
p0372 N73-29029

GLAZUNOV, N. I.
The expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057

GLEMBOTSKII, IA. L.
Effects of space flight factors on Drosophila.
p0397 A73-42173

GLENDE, M.
Effects of experimental conditions on parameter estimated when using the Hill model
p0153 A73-21872

GLESER, M. A.
Effects of acute alterations of maximum oxygen consumption on endurance capacity of men.
p0241 A73-29753

GLEZER, V. D.
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958

GLOBUS, G. G.
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102

GLOD, G. D.
Joint effect of stimulators and tranquilizers on performance of a man-operator
p0256 N73-22021

Problems of space biology. Volume 17: Pathophysiological bases of aviation and space pharmacology [NASA-TT-F-736] p0257 N73-22033

GLOOR, P.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011

GLUE, L. C. T.
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42679

GLUECK, S.
Studies of the survival time of bacteria on surfaces and the possibilities of influencing it. 3: Influence of various lighting conditions and previous disinfection in the use of plastics [NASA-TT-F-13923] p0592 N73-10069

GLUSHKOV, B. S.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227

Central nervous system reaction to mechanical factors
p0372 N73-29024

GLUSHKOV, N. N.
Statistical treatment of evoked cerebral potentials during experiments on a Dnepr-1 computer
p0401 A73-42657

GNIRIA, V. A.
Analysis of evoked, initially electronegative potentials
p0276 A73-31159

GNITSEVICH, V. N.
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196

GNUTOV, N. I.
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion
p0080 A73-16696

GODEFROID, A.
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
GOETHES, K. H.
Psychodiagnostic problems in the selection of aviation personnel in developing countries, taking applicants from Yemen as examples
p0368 N73-27956
GOFF, W. R.
Distribution of the human average movement potential.
p0242 A73-29990
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses [AD-746302]
p0610 N73-11082
GOFMAN, S. S.
Correlation analysis of the bioelectrical activity of the brain during mental work
p0163 A73-23678
GOGEL, W. C.
Absolute motion parallax and the specific distance tendency.
p0234 A73-28096
Scalar perceptions with binocular cues of distance.
p0235 A73-28176
GOGNIASHVILI, O. SH.
Electron-microscopy investigation of Corti's organ after noise trauma
p0078 A73-16333
GOGOLITSYN, IU. L.
Objective method for classification of multicellular activity patterns of neuron population in the cerebrum of man
p0401 A73-42656
GOGSADZE, V. G.
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857
GOKIN, A. P.
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249
GOL'DGEFTER, L. I.
Y-chromosome localization in the interphase nuclei of cerebral neurons in man
p0582 A73-11444
GOL'DSHTEIN, M. M.
The effects of bilateral destruction of certain medial-hypothalamus structures on the formation of complement-binding antibodies
p0117 A73-19647
GOL'TSMAN, M. I.
Ways of enhancing the efficiency of physical exercise
p0280 A73-31515
GOLARZ DE BOURNE, M. M.
The pathology of innactivation in monkeys.
p0314 A73-35983
GOLARZDEBOURNE, M. M.
Breeding monkeys for biomedical research
p0266 N73-23063
GOLD, A. J.
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
GOLD, M. H.
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
GOLDBERG, A. L.
Oxidation of leucine by rat skeletal muscle.
p0077 A73-16152
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
GOLDBERG, M. E.
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445
GOLDING, B.
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492
GOLDMAN, M. D.
Mechanical interaction between the diaphragm and rib cage.
p0359 A73-39778
GOLDMAN, R. F.
Vigilance under induced hyperthermia.
p0095 A73-18469
Predicting heart rate response to work, environment, and clothing.
p0158 A73-22931
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
GOLDSCHLAGER, N.
Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444
Exercise-induced ventricular arrhythmias in patients with coronary artery disease - Their relation to angiographic findings.
p0209 A73-27890
GOLDSMITH, R. L.
Evaluation of 165 deg F reverse osmosis modules for washwater purification. [ASME PAPER 73-ENAS-2]
p0349 A73-37964
GOLDSMITH, W.
Impact on a simple physical model of the head.
p0170 A73-24770
GOLDSMITH, W. M.
Space-time adaptation of visual position constancy.
p0304 A73-34223
GOLDSTEIN, M. A.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
GOLDSTONE, J.
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199
GOLDZIEHER, J. W.
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
GOLITSYN, G. A.
A dynamic theory of behavior
p0447 N73-33054
GOLLNICK, P. D.
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
GOLOV, D. O.
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
GOLOVA, I. D.
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
GOLOVAN', E. T.
An associative-network model of memory
p0061 A73-15797
GOLTSMAN, M. I.
Ways to increase effectiveness of physical training
p0263 N73-23039
GOLUBETS, M. A.
The state and prospects of biogeocenological research [JPRS-59395]
p0338 N73-27053
GOLUBEV, V. I.
On the mechanism of adaptation of micro-organisms to conditions of extreme low humidity.
p0396 A73-42164
GOLUBEV, V. N.
Method for quantitative estimation of the functional state of the motor apparatus
p0047 A73-13822
GOLUBEVA, L. IU.
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium

during severe heart strain
p0389 A73-41278
GOMES, G. S.
Time zones and sport
[NASA-TT-F-14632] p0073 N73-13116
GONZAKOV, O. A.
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
GONDZHILASHVILI, IA. I.
Search of optimal biological conservation conditions for a heart, using methods of mathematical experiment planning
p0117 A73-19648
GONEN, B.
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
GONG, H., JR.
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.
p0094 A73-18335
GONSHOR, A.
Effect of changes in illumination level on electro-oculography (EOG)
[AMRU-R-71-1] p0607 N73-11064
GONZALEZ, C. C.
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116
Spacecraft microbial burden reduction due to atmospheric entry heating: Jupiter
[NASA-CR-132072] p0292 N73-24117
GOOCH, A. S.
Exercise testing for detecting changes in cardiac rhythm and conduction.
p0043 A73-13542
GOODKIN, F.
Time course of lateral inhibition in the human visual system.
p0206 A73-27124
GOODMAN, A. L.
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
GOODNO, J. P.
Effect of whole-body vibration on peripheral nerve conduction time in the Rhesus monkey.
p0196 A73-25335
GOODRICH, J. K.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
GOODWIN, A. W.
The effect of colour on time delays in the human oculomotor system.
p0308 A73-34847
The interaction between horizontal and vertical eye-rotations in tracking tasks.
p0346 A73-37417
Recognition of component differences in two-dimensional oculomotor tracking tasks.
p0407 A73-42959
GOODWIN, B. C.
The explanation and investigation of biological rhythms.
p0286 A73-33155
GOODWIN, J. F.
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
GOPINATH, P. M.
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
GORBAN, G. M.
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
GORBUNOVA, L. A.
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
GORDON, B.
The superior colliculus of the brain.
p0094 A73-18347
GORDON, D. G.
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556
GORDON, S. A.
Effect of free fall on higher plants.
p0397 A73-42172
GORDON, Z. V.
Pathological effects of radio waves.
p0348 A73-37774
GORE, I.
Coronary atherosclerosis and ischemic myocardial damage.
p0320 A73-36538
GORELICK, D.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] p0612 N73-11097
GORFINKEL, H. J.
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540
GORIZONTOV, P. D.
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644
GORLIN, R.
Assessment of hypoxia in the human heart.
p0118 A73-19928
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804
GORMLEY, W. T.
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys
[AD-751232] p0140 N73-16092
GORODINSKII, S. M.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
GORODINSKIY, C. M.
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
GORODINSKIY, S. M.
Change in calcium content in human bone tissue accompanying thermal stress
p0444 N73-33033
GOROKHOV, A. L.
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157
GOROVENKO, G. G.
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623
GORYUNOV, Y. P.
Soviet cybernetics review (selected articles)
[AD-751145] p0178 N73-18143
GOSTOMZYK, J. G.
Drug use and performance
p0228 N73-21115
GOTMAN, J.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011
GOTSMAN, M. S.
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596
GOTTESMANN, C.
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917

GOTTLIEB, G. L.
Further observations on the relationship of EMG and muscle force
p0599 N73-10117
GOTZOYANNIS, S.
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography.
p0583 A73-11509
GOUARS, M.
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
Possibility of predicting predisposition of motion sickness in the selection of pilots
p0225 N73-21094
GOULD, J. D.
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Eye movements during visual search and memory search.
p0239 A73-29125
Visual search, complex backgrounds, mental counters, and eye movements.
p0388 A73-41185
Studies of visual inspection.
p0423 A73-43212
GOULD, K. G., JR.
Aeromedical evaluation of the phased-dilution concept for oxygen breathing systems
p0266 N73-23065
GOURAS, P.
S-potentials.
p0161 A73-23314
Light and dark adaptation.
p0162 A73-23317
GOURISHANKAR, V.
A method for aiding human operator performance in a noncompensatory tracking task.
p0578 A73-10323
GOVARDOVSKIY, V. I.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
GOVORUN, R. D.
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays
p0263 N73-23041
GRACHEV, V. I.
Method for automatic processing of the indices of an operator's gas exchange during work in a trainer using a ""DNEPR'' electronic computer
p0444 N73-33035
GRAFF, W. J.
Factors concerned with sanitary landfill site selection: General discussion
[NASA-CR-128744] p0189 N73-19157
GRAHAM, D.
Manual control theory applied to air traffic controller-pilot cooperation
p0598 N73-10113
GRAHAM, M.
Summary of visual detection data taken during the ATA/CAS flight tests
p0231 N73-21148
GRAHN, D.
Ionizing radiation
p0105 N73-15100
GRALL, Y.
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911
GRANBART, J. E.
Human engineering analysis of airport lighting control panels and a proposal for a new design
[FAA-RD-72-93] p0066 N73-12108
GRANATA, L.
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533
GRANDJEAN, E.
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
GRANDTNER, M.
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
GRANSTREM, M. P.
Functional model of the frequency channel of the peripheral auditory analysor
p0164 A73-23808
GRANT, C.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133
GRANT, J. W.
Biomechanics of the semicircular canals.
p0315 A73-36430
GRANZER, F.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
GRASHA, A. F.
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
GRASSINO, A. E.
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415
GRASSMAN, E. D.
New instrumentation for measurement of man's stability of stance
[AD-763096] p0377 N73-29067
GRAU, U.
Acquisition of signal concepts under conditions of aversion activation. I - Theoretical part and form interpretation test
p0285 A73-33091
GRAUL, E. H.
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
The Biostack experiment on Apollo 16.
p0399 A73-42185
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
GRAVES, G. A.
Bone strength and in-flight mechancial stresses
[AD-754982] p0221 N73-20134
GRAY, D.
An inexpensive technique for analysis of aortic-nerve activity.
p0403 A73-42681
GRAY, G. M.
Starch hydrolysis in man - An intraluminal process not requiring membrane digestion.
p0361 A73-39789
GRAY, G. W.
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
GRAY, L. B.
Lead pencils
p0148 N73-17097
GRAY, W.
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891
GRAYBIEL, A.
Semicircular canals as a primary etiological

factor in motion sickness.
p0588 A73-12560
Direction-specific adaptation effects acquired in a slow rotation room.
p0049 A73-14154
Experiment M-131 - Human vestibular function.
p0307 A73-34741
Altered susceptibility to motion sickness as a function of subgravity level.
p0358 A73-39486
Some of the mechanisms underlying motion sickness
p0591 N73-10020
Direction-specific adaptation effects acquired in a slow rotation room
[NASA-CR-129063] p0591 N73-10062
Specific acute losses of vestibular function in man following unilateral section of one or all components of the eighth cranal nerve
[NASA-CR-129672] p0070 N73-13084
The vestibular system
p0105 N73-15103
Factors contributing to motion sickness susceptibility: Adaptability and receptivity
p0225 N73-21095

GREBENNIKOVA, I. I.
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Effect of prolonged hypokinesia on some indices of energy metabolism in the skeletal muscles and in some internal organs
p0262 N73-23029

GRECHIN, V. B.
Characteristics of spontaneous oxygen tension variations in human brain structures
p0249 A73-30844

GREEN, J.
Effects of color differences in a letter matching task.
p0588 A73-12525

GREEN, J. A.
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111

GREEN, K. A.
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095

GREEN, R. S.
Frontal sinus hematomas in aerospace medicine.
p0155 A73-22538

GREENBERG, S. N.
Multi-task time-sharing requirements
[AD-755363] p0269 N73-23088

GREENE, A. E. S.
Charged particle impact phenomena for radiobiological applications
[ORO-3798-52] p0070 N73-13090

GREENE, P. R.
Hierarchical hybrid control of manipulators: Artificial intelligence in large scale integrated circuits
[NASA-CR-131403] p0224 N73-20156

GREENE, R.
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927

GREENE, R. E.
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167

GREENFIELD, E.
Spline function interpolation in interactive hemodynamic simulation.
p0098 A73-18889

GREENFIELD, J. C., JR.
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638

GREENLEAF, J. E.
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
Blood electrolytes and exercise in relation to temperature regulation in man.
p0332 A73-36983
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Body water compartments during bed rest: Evaluation of analytical methods
[NASA-TR-R-406] p0295 N73-24133

GREENOUGH, E. E.
The development of a non-cryogenic nitrogen/oxygen supply system
[NASA-CR-128688] p0112 N73-15159
Water electrolysis system refurbishment and testing
[NASA-CR-128687] p0112 N73-15160

GREENSTEIN, G. J.
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219

GREGG, D. E.
Factors influencing coronary blood flow in the presence of coronary obstructive disease.
p0321 A73-36539

GREGOIRE, H. G.
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft.
p0050 A73-14161
Comparative motion sickness symptomatology and performance decrements occassioned by hurricane penetrations in C-121, C-130, and P-3 Navy aircraft
[AD-743928] p0596 N73-10100

GRENOBLE, D. E.
Unified approach to the biomechanics of dental implantology
p0191 N73-19977

GRETHER, W. F.
Human performance at elevated environmental temperatures.
p0325 A73-36787
Color vision requirements for air crew personnel of the future
[AMRL-TR-71-116] p0180 N73-19076
Two experiments on the effects of combined heat, noise and vibration stress
[AMRL-TR-71-113] p0188 N73-19146

GRIBAKIN, F. G.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128

GRIFFIN, M. J.
Human response to transportation noise and vibration.
p0310 A73-35328
The transmission of triaxial vibration to pilots in the Scout AH MkI helicopter
[ISVR-TR-58] p0141 N73-16100
A survey of human response to vibration research in Great Britain
[ISVR-TR-60] p0415 N73-30093

GRIFFIN, R. M.
Convectionless electrophoretic separation of biological preparations
[NASA-CR-123920] p0606 N73-11055

GRIFFITHS, P. R.
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484

GRIGOR'EV, IU. G.
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182

GRIGOR'EVA, L. P.
Electroretinogram recovery cycle during light adaptation and after dark adaptation
p0168 A73-24518

GRIGOREV, Y. G.
Vestibular reactions methods of study and the effects on various environmental factors
[AD-753511] p0220 N73-20132

GRIGORIEV, A. I.
Effect of physical training and electric stimulation on metabolism

p0256 N73-22019
Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028

GRIGORYEV, Y. G.
Physical and radiobiological investigations on artificial earth satellites: Estimating the radiation hazard of space flights [NASA-TT-F-724] p0173 N73-18098

GRILLNER, S.
The role of muscle stiffness in meeting the changing postural and locomotor requirements for force development by the ankle extensors.
p0587 A73-12166

GRIMAK, L.
Emotional stresses during a space flight
p0116 A73-19297
Cosmonaut's emotional stress in space flight [NASA-TT-F-14654] p0067 N73-12113
Emotional stress during spaceflight [JPRS-58039] p0148 N73-17104

GRISHAYENKOV, B. G.
Principal characteristics of a method for regenerating the oxygen in pressurized chambers based on electrolysis with use of solid electrolytes
p0441 N73-33015

GRISHIN, E. P.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123

GRISHIN, Y. P.
State of the visual analyzer under hypokinetic conditions
p0255 N73-22014

GRISSETT, J. D.
A new technique for measuring scotopic critical flicker frequency to indicate psychophysiological stress [AD-748193] p0101 N73-14088

GRODINS, F. S.
Respiratory cycle optimization in exercise.
p0433 A73-45066

GROMOV, A. B.
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848

GROMOVA, E. A.
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep
p0345 A73-37394

GROMYKO, N. M.
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

GROSSMAN, W.
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259

GROVER, B. G.
Dark adaptation of the frog's rods.
p0407 A73-42963

GROVER, R. F.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Ventilatory control in the Hereford calf.
p0360 A73-39782
Time course of respiratory adaptation to high altitude [AD-755192] p0267 N73-23075

GROVER, T.
Recent measurements of flow using nuclear magnetic resonance techniques.
p0171 A73-24855

GROZDOVA, T. IA.
Effects of space flight factors on Drosophila.
p0397 A73-42173

GRUBB, R. L., JR.
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence.
p0361 A73-39790

GRUESSER-CORNEHLS, U.
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454

GRUESSER, O.-J.
Comparative physiology of movement-detecting neuronal systems in lower vertebrates /anura and urodela/.
p0317 A73-36454

GRUNBAUM, B. W.
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963

GRUSCHE, A.
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549

GRYAZNOVA, V. N.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113

GUALTIEROTTI, T.
Resistance of animals immersed in water to high acceleration [NASA-TT-F-14828] p0219 N73-20119

GUARNERI, C. A.
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report summary [NASA-CR-128857] p0190 N73-19158
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Final report [NASA-CR-128858] p0190 N73-19159

GUAZZI, M.
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015

GUBAREVA, I. G.
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

GUBINSKII, A. I.
The effect of various types of failures of a human operator on the effectiveness of his work [AD-764937] p0441 N73-32028

GUDBJARNASON, S.
The use of glycolytic metabolism in the assessment of hypoxia in human hearts.
p0118 A73-19929

GUDKOV, I. M.
Mechanism of the action of radiation protecting agents - A biochemical shock hypothesis
p0207 A73-27499

GUEDRY, F. E.
Assessment of reactions to vestibular disorientation stress for purposes of aircrew selection
p0225 N73-21096
Alcohol and disorientation related responses. 6: Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about the yaw and pitch axes [FAA-AM-72-34] p0416 N73-30989

GUEDRY, F. E., JR.
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485

GUERFIER, G.
Systematic X-ray photography of flight personnel and lung tuberculosis
p0586 A73-12155
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914

GUENTER, K. H.
Intracardiac heart murmurs and sounds influenced by respiration.
p0283 A73-32546

GUETH, V.
A method for chronocyclographical motion analysis with the aid of an on-line computer
p0119 A73-20036

GUGUSHVILI, B. S.
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815

GUHA, S. K.
Electrical field distribution in the human body.
p0427 A73-44216
GUIEU, J.-D.
Model of evaporation responses to heat load increases
p0352 A73-38150
GUIGNARD, J. C.
Aeromedical aspects of vibration and noise
[AGARDOGRAPH-151] p0148 N73-17098
Vibration
p0148 N73-17099
Noise
p0148 N73-17100
GUILLERMIN, M.
Estimation of hypoxia tolerance in a decompression chamber
p0331 A73-36945
GULIAR, S. O.
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
GULIEVA, S. A.
A method for electrocardiogram recording in Rhesus monkeys
p0126 A73-21324
GULLETT, C. C.
Flight crew health maintenance
p0146 N73-17076
GUMINETSKIY, S. G.
Scattering of polarized light by plant cover elements
p0378 N73-29333
GUNNERMAN, K.
Monoptic and dichoptic metacontrast across the vertical meridian.
p0046 A73-13764
GUNDERMANN, K. O.
Studies of the survival time of bacteria on surfaces and the possibilities of influencing it. 3: Influence of various lighting conditions and previous disinfection in the use of plastics
[NASA-TT-F-13923] p0592 N73-10069
GUNN, W. J.
Loudness changes resulting from an electrically induced middle-ear reflex.
p0393 A73-41815
GUNNING, J. P.
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
GUNTHEROTH, W. G.
An ultrasonic displacement instrument with greater beam dispersal.
p0408 A73-43109
GUPTA, G. C.
Effect of lateral body tilts and visual frames on perception of the apparent vertical.
p0392 A73-41736
GUREEVA, Z. P.
Organic and species-related differences in the action of certain hydrazine derivatives and of aminoperhydroacridine on the oxidative deamination of serotonin
p0163 A73-23679
GUREVICH, M. I.
Effect of electrostimulation on hemodynamic shifts during prolonged hypokinesia
p0166 A73-23940
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161
GUREVICH, R. A.
Physical model selection for the balance preservation system in man
p0431 A73-44903
GURFINKEL', V. S.
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
GURK, C.
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
GUROVSKIY, N. N.
Physiological problems of prolonged weightlessness
[NASA-TT-F-14672] p0149 N73-17110
Fourth All-Union Conference on Space Biology and Medicine
[JPRS-58345] p0176 N73-18125
GURVICH, G. I.
Hyperventilation in pilots during flight
p0343 A73-37197
Work of the Aerospace Section of the Leningrad Society of Physiologists, Biochemists and Pharmacologists Imeni I. M. Sechnov
p0445 N73-33037
GUSAROV, B. G.
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method
p0184 N73-19110
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion
p0184 N73-19111
GUSEINOVA, R. A.
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400
GUSEL'NIKOV, V. I.
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
GUSHCHEVA, T. M.
Ergonomics research methods
p0414 N73-30086
GUTAUSKAS, A. I.
Investigation of the geometry of the dendritic tree of retinal ganglion cells
p0349 A73-37944
GUTH, S. L.
On neural inhibition, contrast effects and visual sensitivity.
p0200 A73-26197
GUTTMAN, H. N.
Effects of oxygen-augmented atmosphere on the immune response.
p0307 A73-34743
GUYATT, A. R.
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
GUYTON, A. C.
Effect of maximal work load on cardiac function.
p0288 A73-33991
GVOZDIKOVA, Z. M.
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569
GYR, J.
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556

H

HAAIJMAN, J. J.
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Visually evoked cortical potentials to patterned stimuli in monkey and man
[IZF-1972-24] p0264 N73-23049
HAAR, W.
Calorimetric investigation of enzymes. Thermodynamic parameter determination of the interaction between ribonuclease T1 inhibitors and substrates
[PBVG-FBWT-72-12] p0137 N73-16073
Nuclear resonance investigation of enzymes. PMR spectra of ribonuclease inhibitor complexes
[BMVG-FBWT-72-13] p0137 N73-16074
HAAS, H.
Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
HAAS, H. G.
Active ion transport in heart muscle.
p0197 A73-25594

HAASE, G.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
HABER, E.
Development of sensitive and direct methods for measuring plasma aldosterone and catecholamine concentrations
p0174 N73-18111
HABER, R. N.
The psychology of visual perception.
p0310 A73-35474
HABERMAN, J. D.
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053
HABERMEYER, J. G.
Machining of low percentage beryllium copper alloys
p0144 N73-17059
HACHE, J. C.
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
HADDAD, G. M.
The smallest voluntary saccade - Implications for fixation.
p0246 A73-30394
Normal fixation of eccentric targets.
p0275 A73-31018
Miniature eye movement.
p0383 A73-40411
HADNI, J. C.
Possibility of predicting predisposition of motion sickness in the selection of pilots
p0225 N73-21094
HAEGERSTROM, G.
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
HAFFNER, J. F. W.
Comparison of mental and psychomotor effects of diazepam and ethanol
p0229 N73-21126
HAFT, J. I.
Intravascular platelet aggregation in the heart induced by stress.
p0130 A73-21805
HAGEDORN, I.
Reactivation of phosphorylated acetylcholin-esterase with quaternary pyridine oximes: Determination of influencing factors
[BMVG-FBWT-72-32] p0187 N73-19137
HAGELSTEN, J. O.
Air-transport, a main cause of smallpox epidemics today.
p0326 A73-36791
HAHN, A. W.
Hybrid biological power cells for cardiac pacemakers - Materials evaluation.
p0363 A73-39823
Chronic oxygen electrodes: A feasibility study
[AD-748422] p0074 N73-13120
HAINES, R. F.
Effect of passive 70-deg head-up tilt on peripheral visual response time.
p0169 A73-24566
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Effect of prolonged bedrest and plus Gz acceleration on peripheral visual response time
[NASA-TN-D-7161] p0107 N73-15117
Visual examination apparatus
[NASA-CASE-ARC-10329-1] p0335 N73-26072
HAKEREM, G.
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991
HAKIM, A. A.
Action of a serum protein on muscular contraction.
p0125 A73-21200
HALBACH, C. H.
Investigation of biowaste resistojets for space station application
[NASA-CR-112159] p0112 N73-15161
HALBERG, F.
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
HALBERG, F.
Circaseptan /7-day/ oviposition rhythm and growth of Spring Tail, Folsomia candida /Collembola: Isotomidae/.
p0282 A73-32185
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482
Circadian rhythms of the circulatory system. Literature review: Computerized case study of transmeridian flight and medication effects on a mildly hypertensive subject
[AD-743300] p0595 N73-10090
HALCOMB, C. G.
Effects of noise and response complexity upon vigilance performance.
p0086 A73-17523
Monitoring performance across sense modes - An individual differences approach.
p0093 A73-18244
The effects of reinforcement and responding to both signal and non-signal events on vigilance performance
[AD-747798] p0072 N73-13103
The effects of noise and response complexity upon vigilance performance
[AD-747797] p0072 N73-13105
Vigilance performance as a function of type and latency of response to the signal event
[AD-747801] p0073 N73-13110
Effects of cyclical temperature on vigilance performance
[AD-748451] p0104 N73-14110
Individual differences as a function of four choice informational load and s-r compatibility
[AD-752073] p0150 N73-17115
Self determined work-rest cycles in the heat
p0271 N73-23987
HALE, H. B.
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Findings on the cost of flying transport missions
p0189 N73-19151
HALL, D. O.
The evolution of ferredoxins from primitive life to higher organisms.
p0055 A73-14318
HALL, J.
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
HALL, J. B.
The occurrence of nitrate on the early earth and its role in the evolution of the prokaryotes.
p0203 A73-26490
HALL, J. D.
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032] p0136 N73-16065
Spectra of normal and nutrient-deficient maize leaves
[NASA-CR-132145] p0293 N73-24119
HALL, J. F., JR.
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.

[AD-751735] p0576 A73-10163
Preflight heat stress and recovery
[AD-759173] p0338 N73-27060
HALL, L. B.
Sterilization technology in the United States space program.
p0288 A73-33697
Ten years of development of the Planetary Quarantine Program of the United States.
p0313 A73-35966
HALL, R. H.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
HALL, R. J.
Pupillometry using an advanced-design oculometer
[AD-752121] p0150 N73-17116
HALLENBECK, J. M.
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782
HALLIWELL, R. S.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
Cytological studies of lunar treated tissue cultures
[NASA-CR-128914] p0265 N73-23054
Analytical and radio-histo-chemical experiments of plants and tissue culture cells treated with lunar and terrestrial materials
[NASA-CR-134036] p0416 N73-30988
HALLSTEN, L.
Interindividual differences in homomodal and heteromodal scaling.
p0204 A73-26750
HALONEN, P.
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826
HALPERN, M. S.
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
HAMILTON, H. W., JR.
Predictive modeling of altitude decompression sickness in humans
[NASA-CR-114550] p0136 N73-16066
HAMMERMEISTER, K. E.
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841
HANEGAN, J. L.
Brain calcium - Role in temperature regulation.
p0353 A73-38294
HANEY, T. L.
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
HANLON, M. H.
Advanced trash management system.
[ASME PAPER 73-ENAS-31] p0351 A73-37986
HANNAY, H. J.
Asymmetry in perception - Attention versus other determinants.
p0435 A73-45338
HANNEN, R. A.
Input noise approximation in tracker modeling
p0598 N73-10110
HANSEN, D. R.
Some results of a test at Canadian forces base uplands of a measure of work and responsibility
[DRAE-M45] p0260 N73-22049
HANSEN, J. E.
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
HANSEN, L. W.
Calculation of temperature distribution in the human body.
p0281 A73-31999
HANTZ, C.
Learning of a behavior for regulation of the respiratory environment in rats. I
p0095 A73-18439
HANUSOVA, V.
A respirometer for the continuous measurement of respiration volume with remote transmission
p0119 A73-20035
HARADA, K.
Amino acid precursors in lunar samples.
p0095 A73-18421
HARBISON, S. A.
An introduction to radiation protection.
p0205 A73-27048
HARCUM, E. R.
Cognitions and 'placebos' in behavioral research on ambient noise.
p0406 A73-42950
HARDING, K.
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
HARDMAN, H. F.
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
HARDOUIN, J. P.
Digestive hemmorhages in aircrew - Individual and collective safety
p0332 A73-36952
HARDY, A.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
HARDY, J. D.
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111
HARE, P. E.
Amino acid precursors in lunar samples.
p0095 A73-18421
HAREL, D.
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
HARING, O. M.
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533
HARKER, G. S.
The Mach-Dvorak phenomenon and binocular fusion of moving stimuli.
p0245 A73-30392
Vision: Monocular, bi-ocular, binocular
[AD-749450] p0101 N73-14085
Brightness of a capacitor discharge lamp: Bloch's law for brief flashes
[AD-749452] p0104 N73-14109
HARKONEN, M.
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
HARM, O. J.
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
HARMONY, T.
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
HARNISCHFEGER, G.
Photosensitized inhibitor formation in isolated, aging chloroplasts.
p0122 A73-20453
HARPER, C. R.
Civil aviation medicine in the coming decade.
p0117 A73-19484
Civil aviation medicine in the coming decade.
p0170 A73-24718
Hypoglycemia in airline pilots.
p0326 A73-36790
HARRIS, C. M.
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802
HARRIS, C. S.
Effects of increasing intensity levels of intermittent and continuous 1000-Hz tones on human equilibrium.
p0044 A73-13551
Effects of intermittent and continuous noise on serial search performance.
p0044 A73-13560
Combined effects of noise and vibration on human tracking performance and response time.

[AD-759329] p0196 A73-25334
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
Combined effects of noise and vibration on cognitive and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
HARRIS, D. A.
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
HARRIS, E. H.
Mass, volume, center of mass and mass moment of inertia of the head and neck of the human body
[AD-762581] p0377 N73-29065
HARRIS, E. S.
A study of liver microsomal cytochromes following chronic exposure to dichloromethane
[NASA-TM-X-69101] p0176 N73-18128
Continuous animal exposure to methylene-chloride
[NASA-TM-X-69099] p0177 N73-18129
Continuous exposure of animals to methylisobutylketone
[NASA-TM-X-69100] p0177 N73-18130
HARRIS, J. A.
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599
HARRIS, J. D.
Binaural improvement in normal and defective ears in a background of other voices
[AD-746101] p0597 N73-10103
HARRIS, R.
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555
HARRIS, T. H.
Handling qualities and realistic training.
p0083 A73-16733
HARRIS, W. S.
Cardiac toxicity of aerosol propellants
[AD-751425] p0140 N73-16090
HARRISON, C. E.
Myocardial oxygen consumption in experimental hypertrophy and congestive heart failure due to pressure overload.
p0404 A73-42688
HARRISON, D. C.
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
HARRISON, D. R.
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
HARRISON, J.
Brightness of a capacitor discharge lamp: Bloch's law for brief flashes
[AD-749452] p0104 N73-14109
HARRISON, J. M.
The probabilistic structure of planetary contamination models
[NASA-CR-130558] p0148 N73-17103
HARRISON, M. H.
Comparison of the metabolic effects of centrifugation and heat stress in man.
p0196 A73-25338
Emotional and cardiovascular stresses of centrifugation: Effect of beta receptor blockade on heart rate response
p0188 N73-19149
HARRY, D.
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755
HART, H. R., JR.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150
HART, R. A.
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
HARTLEY, L. H.
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420
HARTLINE, H. K.
Inhibitory interaction in the retina of Limulus.
p0161 A73-23311
HARTMAN, B. O.
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
Findings on the cost of flying transport missions
p0189 N73-19151
HARTUNG, W. H.
Development of a laboratory prototype water quality monitoring system suitable for use in zero gravity
[NASA-CR-112267] p0222 N73-20144
HARVEY, E. A.
Precision survivor locator for search and rescue applications.
[AHS PREPRINT 720] p0309 A73-35061
HASBROOK, A. H.
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
HASEGAWA, H.
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319
HASKELL, W. L.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
HASSLER, R.
Supranuclear structures regulating binocular eye and head movements.
p0317 A73-36451
HATCHER, J. B.
A linear motion generator for physiological research.
p0577 A73-10173
HAUN, C. C.
The acute inhalation toxicology of chlorine pentafluoride.
p0282 A73-32173
Continuous animal exposure to dichloromethane
[AD-746295] p0611 N73-11088
Chronic exposure studies with monomethylhydrazine
[AD-751440] p0139 N73-16087
Continuous animal exposure to methylene-chloride
[NASA-TM-X-69099] p0177 N73-18129
HAURI, P.
Alpha-delta sleep.
p0156 A73-22694
HAWEL, W.
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
HAWKINS, D. R.
Alpha-delta sleep.
p0156 A73-22694
HAWTHORNE, E. W.
Prolonged weightlessness (300 plus days) and cardiac performance in primates. 1: Neuro-humoral mechanisms in the control of

cardiac and vascular performance in conscious animals
[NASA-CR-129512] p0063 N73-12075
HAY, J. C.
Space-time adaptation of visual position constancy. p0304 A73-34223
HAYASHI, T.
Unusual diastolic heart beat in pericardial effusion. p0041 A73-13059
HAYDEN, P.
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice. p0357 A73-39480
HAYNE, H. S.
A model of psychological annoyance of noise. p0311 A73-35627
HAYWARD, J. S.
Thermographic evaluation of relative heat loss areas of man during cold water immersion. p0325 A73-36781
HAZUCHA, M.
Pulmonary function in man after short-term exposure to ozone. p0381 A73-40001
HEADRICK, M. R.
Investigation of an astronaut maneuvering scheme p0339 N73-27063
HEARNS, J. F.
Effects of prestimulus cuing and target load variability on maintenance of response strategies in a visual search task. p0353 A73-38378
HEBERT, J.
Release of bacterial spores from the inner walls of a stainless steel cup subjected to thermal stresses and mechanical shock
[NASA-CR-133868] p0416 N73-30987
HEBERT, J. A.
Adaptation-level and theory of signal detection - An examination and integration of two judgment models for voluntary stimulus generalization. p0204 A73-26749
HECHT, K.
Quantitative evoked-potential analyses for the neurophysiological characterization of faulty learning processes in the experimental arterial hypertonia-pathogenesis p0348 A73-37756
HEDL, J. J., JR.
Test anxiety: Situationally specific or general
[AD-746453] p0066 N73-12104
HEERING, H.
Summaries, biological effects of microwave radiation, part 5
[NBL-1972-5] p0591 N73-10060
Summaries, biological effects of microwave radiation, part 6
[NBL-1972-6] p0591 N73-10061
Biological effects of microwave radiation, part 1
[NBL-1971-7-PT-1] p0264 N73-23048
HEERSMA, J.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
HEIDELBAUGH, N. D.
Microbiological testing of Skylab foods. p0205 A73-27075
Nutrition systems for pressure suits. p0355 A73-39105
Food and nutrition studies for Apollo 16
[NASA-TM-X-58096] p0067 N73-12110
HEILMANN, K.
The incidence of abnormal liver function tests in drug addicts without a history of jaundice
[NASA-TT-F-15041] p0374 N73-29044
HEIMBUCH, A. H.
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] p0259 N73-22048
HEIMPEL, A. M.
Postflight analyses of Bacillus thuringiensis organisms exposed to space flight conditions p0291 N73-24109
HEINSTRA, N. W.
Target-detection performance as a function of noise intensity and task difficulty. p0201 A73-26320
HEINRICH, C. T.
SMEAT atmosphere trace contaminants.
[ASME PAPER 73-ENAS-45] p0351 A73-37992
HEINRICH, M. R.
Solvent effects on enzymes - Implications for extraterrestrial life. p0091 A73-17948
HEINRICH, W.
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina. p0315 A73-36129
HEINRICHS, W.
A method for chronocycloqraphical motion analysis with the aid of an on-line computer p0119 A73-20036
HEINZELMANN, F.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results. p0043 A73-13545
Personal benefits of a health evaluation and enhancement program p0145 N73-17069
The NASA-USPHS health evaluation and enhancement program p0147 N73-17091
HELBIG, M. A.
Complete and isoenzyme content of lactate dehydrogenase in plasma, leukocytes and erythrocytes in myeloproliferative diseases
[NASA-TT-F-14586] p0592 N73-10070
HELD, K.
Effect of fibrinogen concentration on the rheodynamical behavior of human blood
[DLR-FB-73-54] p0446 N73-33046
HELD, R.
Moving visual scenes influence the apparent direction of gravity. p0058 A73-15250
Residual visual function after brain wounds involving the central visual pathways in man. p0287 A73-33218
HELVEY, T. C.
Cybernetic integration of experiments into the CVT system
[NASA-CR-124150] p0230 N73-21136
HENBACH, H.
Use of medication and drugs, especially alcohol, by flying personnel p0229 N73-21124
HENNING, F. O.
Aircraft accidents and human factors. p0307 A73-34748
HENDERSON, D. C.
Visual discrimination of motion - Stimulus relationships at threshold and the question of luminance-time reciprocity. p0153 A73-21897
HENDERSON, E.
Morphometry of the human pulmonary arterial tree. p0384 A73-40639
HENDERSON, M.
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products. p0202 A73-26479
HENDRICKS, C. M.
Breathing metabolic simulator p0075 N73-13850
HENDRICKSON, W.
Objective techniques for psychological assessment
[NASA-CR-128945] p0295 N73-24136
HENIG, G.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences. p0398 A73-42179
HENKE, A. M.
A design procedure and handling quality criteria for lateral directional flight control systems p0601 N73-10137
HENKE, R. P.
High Z particle cosmic-ray exposure of Apollo 8-14 astronauts
[AD-745188] p0596 N73-10101
The high energy multicharged particle exposure of the microbial ecology evaluation device on board the Apollo 16 spacecraft

p0292 N73-24114

HENKES, H. E.
Local scotopic responses in ERG and VER.
p0237 A73-28361

HENN, V.
The origin of quick phases of nystagmus in the horizontal plane.
p0316 A73-36436

HENNING, C.
Test results about the effectiveness of Metixenum applied against motion sickness
p0226 N73-21100

HENRIKSSON, J.
Effect of training with eccentric muscle contractions on skeletal muscle metabolites.
p0390 A73-41523

HENRY, G. H.
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421

HENRY, J. P.
Observation of arterial blood pressure of the primate
[NASA-CR-131890] p0252 N73-21980

HENRY, P. H.
Effect of low humidity on human performance
[AD-756835] p0296 N73-24142

HERMAN, E.
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575

HERMAN, M. V.
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804

HERMOSILLO, A.
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542

HERON, J. R.
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354

HERRICK, R. M.
Increment thresholds for multiple identical flashes in the peripheral retina.
p0424 A73-43343

Accuracy of the mean threshold in the psychophysical method of limits
[AD-749334] p0100 N73-14083

Accuracy of the mean threshold and of the variability in the psychophysical method of constant stimuli
[AD-753009] p0187 N73-19141

HERRON, J.
Automatic microscopy for mitotic cell location.
p0206 A73-27144

HERRON, J. M.
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069

HERSHBERG, P. I.
Programmed multiphasic health testing
p0145 N73-17074

Long term clinical relationships of the ventricular premature beat
p0146 N73-17083

HERSHENSON, M.
The psychology of visual perception.
p0310 A73-35474

HERTIG, B. A.
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163

Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481

HESS, R. A.
Nonadjectival rating scales in human response experiments.
p0310 A73-35400

The use of a linear rating scale in selecting a subcritical tracking task parameter
[AD-752036] p0151 N73-17125

HESS, S. L.
European scientific notes, volume 26, no. 6
[AD-746143] p0609 N73-11080

HESTER, J. C.
Hyperfiltration technique applied to wash water reclamation at elevated temperatures.
[ASME PAPER 73-ENAS-27] p0350 A73-37982

HETHERINGTON, R. W.
Method for analyses of cyclic physiological data that are nonstationary in time.
p0049 A73-14120

HEWITSON, V.
European scientific notes, volume 26, no. 6
[AD-746143] p0609 N73-11080

HEYDER, E.
Studies of calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia
[AD-749323] p0258 N73-22035

HEYMANN, M. A.
Distribution of systemic blood flow during cardiopulmonary bypass.
p0158 A73-22930

HEYWOOD, S.
Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark.
p0046 A73-13760

HIBBEN, S. G.
Soviet biocybernetics bibliography, January - May 1972
[AD-750129] p0113 N73-15167

HICKMAN, J.
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555

HICKS, J. A., III
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718

HIEBSCH, CH.
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor F from reticulocytes in the respiratory chain
p0588 A73-12510

HILDEBRANDT, J.
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656

HILDEBRANDT, J. R.
Cardiorespiratory transients in exercising man. I - Tests of superposition. II - Linear models.
p0324 A73-36656

HILDEBRANDT, W.
Investigation concerning a consideration of the human circadian rhythm by means of a variable working time
p0240 A73-29283

HILL, A. R.
Monocular and binocular aspects of apparent movement.
p0121 A73-20262

HILL, D. W.
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124

HILL, J. C.
A dynamic model of the human postural control system
p0599 N73-10116

HILL, J. W.
Touch sensors and control.
p0344 A73-37328

A computer assisted teleoperator control station with tactile feedback
p0602 N73-10143

Studies to design and develop improved remote manipulator systems
[NASA-CR-2238] p0260 N73-22055

HILL, L. W.
Quantitation of buried contamination by use of solvents
[NASA-CR-130720] p0149 N73-17111

HILL, R. M.
Responses of midbrain cells to blur.
p0583 A73-11503

HILLION, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

HILLION, P.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
HILLS, B. A.
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
HILLYARD, L. A.
Effect of low temperature on metabolism of rat liver slices and epididymal fat pads.
p0120 A73-20170
HILLYARD, S. A.
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
HILZ, H.
Signal processing in medical technology
p0424 A73-43317
HILZ, R.
Invariance of visual receptive-field size and visual acuity with viewing distance.
p0353 A73-38484
HIMES, R. H.
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
HINWICH, W. A.
Developmental changes in neurochemistry during the maturation of sleep behavior.
p0051 A73-14261
HINNERS, A. H., JR.
Skylab Medical Experiments Altitude Test /SMEAT/ facility design and operation.
[ASME PAPER 73-ENAS-44] p0351 A73-37991
HIPPENSTEELE, J. R.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
HIPSKIND, S. G.
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507
HIRANO, H.
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
HIROKI, T.
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
HIRSCH, I.
Design modification of electrophoretic equipment
p0231 N73-21140
HISTAND, M. B.
Influence of flow and pressure on wave propagation in the canine aorta.
p0243 A73-30066
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108
HITCHCOCK, H.
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
HIXSON, E. L.
The design and evaluation of an artificial ear
[AD-746691] p0073 N73-13112
HIXSON, W. C.
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485
HLASTALA, M. P.
Significance of the Bohr and Haldane effects in the pulmonary capillary.
p0129 A73-21614
Cyclical variations in PRC and other respiratory variables in resting man.
p0278 A73-31346
Absorption of gas bubbles in flowing blood.
p0400 A73-42414
HOARE, D. W.
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
HOCHSTEIN, L. I.
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans.
p0045 A73-13598
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500
HOCK, P. A.
Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962
Dark adaptation of the frog's rods.
p0407 A73-42963
HOCKWIN, O.
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732
HOCQUEL, J.
Systematic X-ray photography of flight personnel and lung tuberculosis
p0586 A73-12155
HODAHA, H.
Criteria for Vision: Resolution, signal-to-noise ratio contrast
p0450 N73-33631
HODGE, D. C.
Noise and blast
p0106 N73-15106
HODGE, D. H.
Twinbrook Research Laboratory
[PB-210613] p0596 N73-10099
HODGES, M.
Electrocardiographic evidence of left atrial hypertension in acute myocardial infarction.
p0201 A73-26287
HODGSON, J. L.
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794
HODY, G. L.
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054
HOELZL, E.
A device for the continuous measurement of subjective changes
p0285 A73-33090
HOESLI, L.
Transmission of nerve pulses at the switching locations of the brain
p0287 A73-33424
HOF, D. G.
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156
HOFFELT, W.
Flying stress - A measurable quantity
p0408 A73-43130
Some critical comments on the measurement of in-flight strains
p0188 N73-19148
HOFFER, B. J.
The development of synapses in the rat cerebellar cortex.
p0051 A73-14256
HOFFMAN, A. A.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
Experience factors in performing periodic physical evaluations
p0143 N73-17052
HOFFMAN, A. R.
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116
Spacecraft microbial burden reduction due to atmospheric entry heating: Jupiter
[NASA-CR-132072] p0292 N73-24117

Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118

HOFFMAN, B. F.
Genesis of cardiac arrhythmias.
p0097 A73-18874

HOFFMAN, J. I. E.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661

HOFFMANN, G.
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760

HOFFMANN, H.
Experience gained in determining horizontal standard visibility
[DLR-FB-71-22] p0067 N73-12118

HOFFMANN, K.
Biological clocks in animal orientation and in other functions.
p0089 A73-17825

HOFMANN, L. G.
Manual control theory applied to air traffic controller-pilot cooperation
p0598 N73-10113

HOFMANN, M. A.
Differential velocity and time prediction of motion.
p0285 A73-32900

The effects of INH chemoprophylaxis on aviator performance
p0227 N73-21111

HOFSTETTER, H.
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699

HOGAN, R. P.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116

Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117

Thyroid responses to simulated altitude.
p0157 A73-22926

HOGAN, R. P., III
Arterial oxygen increase by high-carbohydrate diet at altitude.
p0576 A73-10164

Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420

HOGG, N.
Gas diffusion across collateral channels.
p0048 A73-14113

HOHLWECK, H.
A new method to record heart rate and respiratory rate inflight on cockpit crews
p0367 N73-27953

Interrelationship between gravity and mechanical impedance of supine humans
p0368 N73-27963

HOLDEN, F. M.
Application of manual control theory to the study of biological stress
p0602 N73-10138

Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154

HOLLAHAN, J. R.
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169

HOLLAND, H. M.
The effect of helmet form on hearing: Free-field thresholds
[AD-745121] p0260 N73-22053

HOLLAND, J. M.
The mammalian response to lunar particulates.
p0203 A73-26484

HOLLENBERG, M. K.
What mediates the renal vascular response to a salt load in normal man.
p0577 A73-10170

HOLLIDAY, T.
Handling the hijacker.
[AD-757130] p0589 A73-12564

HOLLIEN, H.
The contribution of the external auditory meatus to human auditory sensitivity
[AD-751664] p0177 N73-18132

HOLLING, H. E.
Peripheral vascular diseases: Diagnosis and management.
p0089 A73-17871

HOLLMANN, S.
Synthesis rate of phospholipids and cytochromes b5 and P-450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064

HOLMER, I.
Oxygen uptake during swimming in man.
p0577 A73-10171

HOLMES, J. H.
Use of an on-line computer in a study of cardiac arrhythmia.
p0059 A73-15644

HOLMES, W. L.
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787

HOLMQUIST, R.
Sequence data - Magnitude and implications of some ambiguities.
p0116 A73-19218

HOLOCH, J.
Vigilance prognosis with the aid of a computer analysis of the spontaneous electroencephalogram
p0122 A73-20391

HOLZAPFEL, G.
Experience with the method of Grabecki and coworkers for the determination of urine delta-aminolevulinic acid in the prevention of lead poisoning
[NASA-TT-F-14864] p0229 N73-21128

HOMAYOONFAR, N.
The structure of particle tracks.
p0196 A73-25423

HOMICK, G. L.
Findings on American astronauts bearing on the issue of artificial gravity for future manned space vehicles.
p0154 A73-22531

HONMA, S.
Preferred spike intervals in the vibration reflex.
p0578 A73-10410

HONDA, Y.
The macular and paramacular local electroretinograms of the human retina and their clinical application.
p0237 A73-28364

HOOD, D. C.
The effects of edge sharpness and exposure duration on detection threshold.
p0204 A73-26718

Time course of lateral inhibition in the human visual system.
p0206 A73-27124

Recovery of cone receptor activity in the frog's isolated retina.
p0407 A73-42962

Dark adaptation of the frog's rods.
p0407 A73-42963

HOOD, J. D.
Persistence of response in the caloric test.
p0238 A73-28510

HOOD, O. C.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936

HOOFD, L. J. C.
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620

HOOP, J. M.
Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] p0415 N73-30090

HOPKIN, V. D.
Human factors problems in conflict detection and resolution
p0269 N73-23714

HOPKINS, C. O.
Enhancement of human effectiveness in system

design, training, and operation
[AD-748239] p0102 N73-14098
Enhancement of human effectiveness system design, training, and operation
[AD-764761] p0450 N73-33075
HOPPER, R.
Relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance
[AD-759583] p0337 N73-26096
HORAN, L. G.
Limitations of the dipole concept in electrocardiographic interpretation.
p0319 A73-36517
Diagnostic power of the Q wave - Critical assay of its significance in both detection and localization of myocardial deficit.
p0319 A73-36527
Mid- and late changes in the QRS complex.
p0320 A73-36528
HORCHOLLE-BOSSAVIT, G.
The neuronal mechanism of nystagmus.
p0316 A73-36437
HORI, S.
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
HORNECK, G.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
The Biostack experiment on Apollo 16.
p0399 A73-42185
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
Effects of space vacuum and solar ultraviolet irradiation (254 nanometers) on the colony forming ability of Bacillus subtilis spores
p0291 N73-24108
HORNICK, R. J.
Vibration
p0105 N73-15098
HORNIG, A. W.
A study of marine luminescence signatures, part 1
[NASA-CR-114578] p0297 N73-25114
Compendium of marine luminescence signatures, part 2 (appendix C)
[NASA-CR-114579] p0298 N73-25115
HORSFIELD, K.
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
HORSTMAN, D. H.
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
HORVATH, S. M.
Cardiovascular and temperature regulatory changes during progressive dehydration and euhydration.
p0577 A73-10165
Critical temperature of unacclimatized male Caucasians.
p0577 A73-10166
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task.
p0154 A73-22527
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
Relationship between organ weight and blood flow in rats adapted to simulated high altitude.
p0387 A73-41156
Cardiovascular adjustments to progressive dehydration.
p0433 A73-45063
Physiological performance related to multiple stresses such as those experienced in the Air Force operations
[AD-759565] p0341 N73-27082
HORWITZ, B. A.
Ouabain-sensitive component of brown fat thermogenesis.
p0156 A73-22649
HORWITZ, L. D.
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889
HOSENFELD, J. M.
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
HOSKO, M. J.
Effect of carbon monoxide on time perception.
p0381 A73-40000
The effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123
HOSMER, D.
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362
HOSSAIN, S.
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964
HOUCK, O. K.
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990
HOUCK, R. J.
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
HOUCK, R. L.
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219
HOUDAS, G.
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
HOUDAS, Y.
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Model of evaporation responses to heat load increases
p0352 A73-38150
HOUK, W. M.
Human responses to microwave irradiation: A review and evaluation of published reports
[UR-3490-29] p0107 N73-15120
HOULIHAN, R. T.
Hyperbaric oxygen and alveolar surfactants.
[AD-759298] p0238 A73-28507
The effects of oxygen at high pressure on catecholamine metabolism
[AD-759405] p0339 N73-27061
HOUSE, A. S.
Speech perception.
p0243 A73-30277
HOUSTON, C. S.
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783
HOUTGAST, T.
Psychophysical experiments on tuning curves and two-tone inhibition
[IZF-1972-25] p0264 N73-23050
HOWARD, A.
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337
HOWARD, J. H.
Some interactions among driver, vehicle, and roadway variables in normal driving
p0601 N73-10131
HOWARD, H. B.
Some differences among figural aftereffects, apparent motion, and paracontrast.
p0578 A73-10435
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
HOWARD, W. H.
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] p0101 N73-14092

HOWES, W. L.
Loudness function derives from data on electrical discharge rates in auditory nerve fibers
[NASA-TN-D-7297] p0293 N73-24121
HOWITT, J. S.
The assessment of pilot workload.
p0347 A73-37734
HRINCZUK, J. E.
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
HSIAO, P.
Quantitation of buried contamination by use of solvents
[NASA-CR-130720] p0149 N73-17111
HSU, F. T.
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
HSU, L. L.
Conjugation of proteinoid microspheres - A model of primordial recombination.
p0091 A73-17952
HUANG, C. C.
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696
HUBER, C.
Scotopic visibility curve in man obtained by the VER.
p0236 A73-28356
HUBER, C. S.
Nutrition systems for pressure suits.
p0355 A73-39105
HUCKABA, C. E.
Calculation of temperature distribution in the human body.
p0281 A73-31999
HUDSON, A. C.
Simple simulated human head for checking echoencephalographic equipment.
p0403 A73-42672
HUDSON, J. W.
Torpidity in mammals.
p0406 A73-42862
HUENTING, W.
The effects of various seat surface inclinations on posture and subjective feeling of comfort
p0041 A73-13121
HUESCHEN, R. M.
An investigation of a sterile access technique for the repair and adjustment of sterile spacecraft
[NASA-TN-D-7147] p0151 N73-17122
HUGGETT, C.
Habitable atmospheres which do not support combustion.
p0162 A73-23562
HUGGINS, C. T.
Evaluation of human operator visual performance capability for teleoperator missions.
p0344 A73-37327
HUGHES, A.
A visual stimulator employing a T.V. raster display.
p0246 A73-30400
HUGHES, A. D.
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
HUGHES, J. M. B.
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
HUHTA, J. C.
60-Hz interference in electrocardiography.
p0163 A73-23648
HUM, L.
Indirect blood pressure measuring device
p0231 N73-21144
HUMISTON, C. G.
Toxicological evaluation of a beryllium motor exhaust product
[AD-756531] p0259 N73-22042
HUMPHREY, M. F.
Raw liquid waste treatment system and process
[NASA-CASE-NPO-13224-1] p0419 N73-31011
HUMPHRIES, J.
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
HUNG, I. J.
Study of the acoustic reflex in human beings. I - Dynamic characteristics.
p0581 A73-10828
HUNT, L. T.
Informational biopolymer structure in early living forms.
p0090 A73-17946
HUNTER, D. M.
Retinal change induced in the primate /Macaca mulatta/ by oxygen nuclei radiation.
p0314 A73-36125
HURDATO, A.
The influence of altitude on man
p0116 A73-19212
HURLEY, T. L.
Upgrading and extended testing of the MSC integrated water and waste management hardware
[NASA-CR-128878] p0222 N73-20142
HURST, J. W.
Advances in electrocardiography; Proceedings of the Symposium, Emory University, Atlanta, Ga., May 10-13, 1971.
p0318 A73-36516
HUSSEY, M. W.
Regenerative particulate filter development
[NASA-CR-115505] p0268 N73-23084
HUSTON, R. L.
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135
Analysis of swimming motions.
p0194 A73-25184
HUTCHERSON, R. C.
Effects of prolonged stress on steroid levels in parotid fluid
[AD-747682] p0072 N73-13104
HUTCHINS, P. M.
Functional preservation of vascular smooth muscle tissue
[NASA-CR-128897] p0267 N73-23069
HUTTO, G. L.
Sonic booms and sleep - Affect change as a function of age.
p0324 A73-36780
HWANG, C. L.
Simulation of a steady-state integrated human thermal system.
p0282 A73-32225
HWANG, K. C.
Development of design information for molecular-sieve type regenerative CO2-removal systems
[NASA-CR-2277] p0366 N73-27948
HYATT, K. H.
A study of ventricular contractility and other parameters possibly related to vasodepressor syncope
[NASA-CR-128968] p0333 N73-26056
HYATT, R. E.
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505
Effect of acute exposure to CO2 on lung mechanics in normal man.
p0200 A73-26216
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
HYDE, R. W.
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134
HYZA, Z.
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity
p0166 A73-23849

I

IAKIMOV, N.
Saccadic suppression in the presence of structured background.
p0121 A73-20267

IAKOVLEVA, V. I.
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707

IAKOVLEV, N. N.
Ontogenesis of cerebrospinal reflex activity
p0121 A73-20366

IAKOVLEV, N. N.
Role of the sympathico-adrenal system during a period of rest and in adaptation to muscular activity
p0576 A73-10157

Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571

Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660

IAKSHINA, V. M.
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165

IANPIETRO, P. F.
Effects of repeated simulated sonic booms of 1.0 PSF on the sleep behavior of young and old subjects.
p0386 A73-41151

Simulated sonic booms and sleep: Effects of repeated booms of 1.0 PSF
[FAA-AM-72-35] p0333 N73-26057

IANENKO, V. M.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660

IANOPOL'SKAIA, N. D.
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949

IANOVSKII, E. SH.
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940

IANSON, KH. A.
Experimental determination of shear moduli in a compact bone tissue
p0045 A73-13742

Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996

IARYGIN, V. N.
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296

IASINOVSKAIA, F. P.
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655

IATSENKO, K. S.
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000

IAY, C. N.
Application of manual control theory to the study of biological stress
p0602 N73-10138

IBERALL, A. S.
On the physical basis of a theory of human thermoregulation.
[ASME PAPER 73-AUT-J] p0240 A73-29414

IBRAGIMOV, I. I.
Effect of the administration of free amino acids and metabolic cofactors on the distribution of regional biogenic amine contents in the brain and blood of animals
p0157 A73-22864

IBRAHIM, B. B.
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085

IDE, H.
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680

IDEKER, R. E.
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961

IGNATOV, IU. D.
Effect of the electrical stimulation of the sensomotor cortex on the potentials of dorsal roots and on the depolarization of primary spinal afferents
p0401 A73-42652

IGNATYEV, N. B.
Prospects for the building and use of computer controlled manipulators
p0335 N73-26079

Robot-manipulator control algorithms
[JPRS-59717] p0375 N73-29051

IJSENBRANDT, H. J. B.
Single to seven channel lightweight biotelemetry system.
p0052 A73-14281

IL'CHEVICH, M. V.
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161

IL'ICHEVA, E. P.
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688

IL'IN, V. I.
An assembly for electrophysiological and thermometric studies
p0402 A73-42663

IL'INA-KAKUEVA, E. I.
Prolonged space flight and hypokinesia.
p0325 A73-36789

IL'INSKII, I. A.
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939

IL'INSKII, O. B.
Investigation of cutaneous sensibility by focused ultrasound
p0080 A73-16695

IL'IUCHENOK, R. IU.
Neurochemical aspects of the formation of electrographical and behavioral reactions
p0167 A73-24327

IL'NITSKII, V. I.
Effect of physical exercises on the lung rheogram
p0169 A73-24524

ILICHEV, V. D.
Voice and hearing in the system of acoustic orientation of animals
[NLL-DRIC-TRANS-3056-(3623.66)] p0291 N73-24101

Voice and hearing in the system of acoustic orientation of animals
[DRIC-TRANS-3056] p0298 N73-25121

ILICHEVA, E. F.
Diurnal rhythm of the content of biogenous amines (histamine, serotonin) in human blood under normal conditions and during altered work-sleep cycles
p0064 N73-12089

ILIFF, L. D.
Effect of interstitial edema on distribution of ventilation and perfusion in isolated lung.
p0577 A73-10167

Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927

ILLE, J.
Valvular cardiopathies and tolerance to flight
p0115 A73-19209

ILYUKHINA, V. A.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029

IMHICH, T.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112

IMSHENETSKII, A. A.
On the multiplication of xerophilic micro-organisms under simulated Martian

conditions.
p0396 A73-42165
INCE, F.
Detecting slow changes in system dynamics
[AD-748243] p0102 N73-14097
INGELFINGER, A. L.
Waste Management System overview for future spacecraft.
[ASME PAPER 73-ENAS-18] p0350 A73-37974
Atmosphere control
p0106 N73-15108
INGELS, N. B., JR.
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
INGLE, D.
Two visual systems in the frog.
p0389 A73-41302
INGLING, C. E., JR.
Retinal receptive fields - Correlations between psychophysics and electrophysiology.
p0246 A73-30397
Brightness additivity for a grating target.
p0246 A73-30398
INNES, E. E.
Subjective and physiological indicators of fatigue in a vigilance task
[AD-761503] p0413 N73-30077
INOUE, K.
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
INSULL, W., JR.
Atherosclerosis and coronary heart disease.
p0320 A73-36531
Lipids in arteriosclerotic arterial tissues of man.
p0320 A73-36534
INTIZAROV, M. M.
The use of ultra-fine fiber filter cloth for removing bacterial contaminants from the air
[NASA-TT-P-14940] p0293 N73-24123
IOANNIDIS, E. J.
Orthogonal versus planar vector-electrocardiography.
p0118 A73-19930
IOANNIDIS, P. J.
Orthogonal versus planar vector-electrocardiography.
p0118 A73-19930
IOFFE, V. G.
Combustibility and toxicity of metals and alloys, selected articles
[AD-764287] p0418 N73-31003
IONKOV, D. I.
Influence of different motor regimes on the convulsive reactivity of the central nervous system.
p0085 A73-17178
IONOV, B. V.
Autoradiographic study of protein synthesis in perikaryons and of nitrogen migration into the axons of hypertrophic sympathetic neurons
p0235 A73-28296
IORDANISHVILI, E. K.
Effects of space flight factors on Drosophila.
p0397 A73-42173
IOSELIANI, K. K.
Informative parameters of the psychophysiological state of flight personnel when working with indicators
p0305 A73-34237
Informative parameters of the psychophysiological state of flight personnel when working with an indicator
p0373 N73-29035
IOSELIANI, T. K.
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381
IRVING, L.
Aquatic mammals.
p0406 A73-42861
ISAAKIAN, L. A.
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
ISABAEVA, V. A.
High mountain areas and hemocoagulation
p0584 A73-11923
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation
p0208 A73-27713
ISABAIEVA, V. A.
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high mountain conditions
p0217 N73-20107
ISABENKO, V. V.
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701
ISAKOV, P. I.
Ideas of K. E. Tsiolkovskiy and modern points of view on the mechanisms of the influence of weightlessness
p0371 N73-29022
ISAYENKO, V. V.
Physiological effect of the replacement of atmospheric nitrogen by inert gases at high and low temperature
p0216 N73-20095
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024
ISHERWOOD, J. E.
Effects of space environment on T-7 bacteriophage and spores of Bacillus subtilis 168
p0291 N73-24107
ISHIKAWA, K.
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.
p0399 A73-42341
ISLAMGALIEVA, F. M.
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
ISLAMGALIYEVA, F. M.
Increase in the tolerance of rats to a high temperature under the influence of thermal conditioning and drugs
p0216 N73-20099
ISLEY, H. N.
Determining training device requirements in fixed wing aviator training
[AD-744447] p0604 N73-10158
ITO, U.
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
IUGANOV, E. M.
The problem of organism responsiveness in aviation medicine
p0193 A73-25039
IUKHNOVSKII, G. D.
Influence of restricted motor activity on the resistance of animals to acute action of carbon monoxide
p0280 A73-31519
IUNUSOV, A. IU.
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature
p0390 A73-41438
IUNUSOV, F. S. M.
Safety measures in aviation industry
p0312 A73-35869
IURCHENKO, V. P.
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
IURKIANETS, E. A.
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/
p0249 A73-30843
IUROV, S. S.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
IVANINA, T. A.
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes

of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717

IVANITSKII, G. R.
Methods and technique of machine analysis of biological structures
[JPRS-57418] p0070 N73-13085

IVANOV-MUROMSKII, K. O.
Approaches to the realization of complex biotechnological systems
p0159 A73-23298

IVANOV-MUROMSKII, K. A.
Models of brain activity
p0579 A73-10651

IVANOV, A. A.
Auto-antibodies of an irradiated organism
p0060 A73-15711

IVANOV, E. A.
Work movement performance of the astronaut in flight.
p0207 A73-27645

IVANOV, K. P.
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803
Afferent connections of the thermoregulation center
p0199 A73-26086

IVANOV, L. A.
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676

IVANOV, V. A.
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958

IVANOV, V. P.
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128

IVANOVA, L. V.
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101

IVASHCHENKO, N. I.
Effects of space flight factors on Drosophila.
p0397 A73-42173

IVES, J. R.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011

IVISON, J. H.
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279

IWAI, E.
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989

J

JACKSON, D. H.
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842

JACKSON, G. A.
A hybrid computer program for the visual display of compensatory system model parameters
p0598 N73-10109

JACOBI, H. H.
Unusual properties of repetitive fasciculations.
p0359 A73-39761

JACOBS, H. K.
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603

JACOBS, J. J.
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869

JACOBS, M.
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975

JACOBS, R. S.
Simulator motion as a factor in flight-director display evaluation
[AD-749370] p0075 N73-13126

JACOBSON, I. D.
Investigation of traveler acceptance factors in short haul air carrier operations
p0591 N73-10023
Analysis of passenger acceptance of commercial flights having characteristics similar to STOL
[NASA-CR-132285] p0367 N73-27950

JACOBSON, J. H.
Luminance-duration relationship in the human EMG.
p0237 A73-28363

JACOBY, I.
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161

JACQUEMIN, C.
Energy balance during moderate exercise at altitude.
p0277 A73-31343

JAENIG, G.-R.
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin.
p0241 A73-29850

JAGACINSKI, R. J.
Mapping an operator's perception of a parameter space
p0600 N73-10129

JAGNEAU, A. H.
Comparison of plethysmographic and electromagnetic flow measurements.
p0427 A73-44215

JAHN, W.
Radiation sterilization with a Van de Graaff accelerator
[NASA-TT-F-14821] p0219 N73-20120

JAMES, T. H.
Order and disorder in the rhythm of the heart /Fifth Annual George C. Griffith Lecture/.
p0130 A73-21806
QRS abnormalities in AV block - Variations and their significance.
p0319 A73-36521

JAMES, S.
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944

JANSEN, C. R.
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622

JANSSON, H.
Use of a digital computer for studying velocity judgements of radar targets.
p0423 A73-43213

JASIONOWSKI, W. J.
Evaluation of RO modules for the SSP ETC/LSS.
[ASME PAPER 73-ENAS-22] p0350 A73-37978
Upgrading and extended testing of the MSC integrated water and waste management hardware
[NASA-CR-128878] p0222 N73-20142

JASKANAS, S. R.
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125

JANOBSKI, W.
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100

Spacecraft microbial burden reduction due to atmospheric entry heating: Jupiter
[NASA-CR-132072] p0292 N73-24117
JEAN, A.
Localization and activity of medullary swallowing neurons
p0046 A73-13786
JEANNEROD, M.
Saccade correlated events in the lateral geniculate body.
p0317 A73-36449
JEFFRESS, L. A.
Binaural signal detection - Vector theory.
p0244 A73-30283
JEFFREY, T. E.
Effect of training on coordinate determination of SLAR (Side-Looking Airborne Radar) imaged features
[AD-762342] p0371 N73-27979
Effect of photo degradation on interpreter performance
[AD-763908] p0440 N73-32024
JEFFREYS, D. A.
Source locations of pattern-specific components of human visual evoked potentials. I - Component of striate cortical origin. II - Component of extrastriate cortical origin.
p0057 A73-15024
JELINEK, J.
Polyvinylpyrrolidone used as cryoprotective substance for erythrocyte preservation
[NASA-TT-F-14590] p0069 N73-13076
JENDEN, D. J.
A hybrid broad-band EEG frequency analyzer for use in long-term experiments.
p0057 A73-14847
JENNEY, L. L.
Measurement of operator workload in an information processing task
[NASA-CR-2150] p0070 N73-13087
JENNINGS, C. L.
Psychiatric and psychometric predictability of test pilot school performance.
[AD-754148] p0050 A73-14165
JENSEN, D. L.
Precision survivor locator for search and rescue applications.
[AHS PREPRINT 720] p0309 A73-35061
JENSEN, E.
Studies on pre-biological evolution. 3: Black azulmic acids obtained from ammonium cyanide
[NASA-TT-F-14640] p0070 N73-13089
JEQUIER, E.
Human calorimeter with a new type of gradient layer.
p0324 A73-36662
JESSEN, C.
Stimulation of panting by isolated heating of the spinal column in the wake dog
[NASA-TT-F-14998] p0338 N73-27054
JESSEN, K.
Air-transport, a main cause of smallpox epidemics today.
p0326 A73-36791
JEWELL, J.
Some technical aspects of sea survival after ejection.
p0284 A73-32665
JEX, H. R.
Problems in modeling man machine control behavior in biodynamic environments
p0597 N73-10105
Effects of display format on pilot describing function and remnant
p0599 N73-10123
Visual motor response of crewmen during a simulated 90 day space mission as measured by the critical task battery
p0601 N73-10133
Visual-motor response of crewmen during a simulated 90-day space mission as measured by the critical task battery
[NASA-CR-2240] p0295 N73-24134
JIJIWA, H.
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
JOHANNSEN, G.
Anthropotechnical investigation of an above-ground indication and of an artificial horizon with preindication in connection with the manual control of VTOL aircraft
p0282 A73-32044
Development and optimization of a nonlinear multiparameter model for the human operator
p0597 N73-10106
JOHNSEN, E. G.
Potential teleoperator applications in manned aerospace systems
p0270 N73-23904
JOHNSON, A. K.
Analysis of decelerator, accelerator and shock cord propelled rebound sleds for evaluating air bag restraints
[PB-212706] p0224 N73-20155
JOHNSON, C.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117
JOHNSON, E. J.
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
JOHNSON, P. C.
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
The medical aspects of space flight seen from the viewpoint of nuclear medicine
p0174 N73-18106
JOHNSON, R. E.
Production of gaseous nitrogen during human steady state exercise.
p0050 A73-14163
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755
JOHNSON, R. H.
Automated flight training (AFT). Instrument flight maneuvers
[AD-759366] p0341 N73-27080
JOHNSON, S. L.
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
JOHNSON, T. P.
Effects of altitude stress on mitochondrial function.
p0246 A73-30430
JOHNSTON, J. E.
Application of remote sensing techniques for appraising changes in wildlife habitat
p0142 N73-16396
JOHONSSON, R.
Can attention be diverted?
[FOA-2-C-2482-H5] p0611 N73-11092
JOLIFF, J.
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army
p0329 A73-36929
JOLLEY, O. B.
Determining training device requirements in fixed wing aviator training
[AD-744447] p0604 N73-10158
JONES, G. M.
DRB Aviation Medical research Unit reports. Volume 2: 1968-1971
[DR-215] p0606 N73-11057
The functional significance of semicircular canal size
[AMRU-R-69-1] p0606 N73-11058
Characteristics of neural transmission from the semicircular canal to the vestibular nuclei of cats
[AMRU-R-70-2] p0606 N73-11059
Dynamic asymmetry in neural components of the vestibular system
[AMRU-R-69-2] p0607 N73-11060
Response of semicircular canal dependent units in vestibular nuclei to rotation of a linear

acceleration vector without angular acceleration
[AMRU-R-70-4] p0607 N73-11061
A quantitative study of vestibular adaptation in humans
[AMRU-R-70-1] p0607 N73-11062
Origin significance and amelioration of coriolis illusions from the semicircular canals: A non-mathematical appraisal
[AMRU-R-70-6] p0607 N73-11063
A model of eye movements induced by head rotation
[AMRU-R-71-3] p0607 N73-11065
Vestibulo-ocular responses in man during sleep
[AMRU-R-70-3] p0608 N73-11066
Organization of neural control of the vestibulo-ocular reflex arc
[AMRU-R-71-2] p0608 N73-11067
Neural response of the vestibular system to translational acceleration
[AMRU-R-69-3] p0608 N73-11068
Man-machine integration: A long term look
[AMRU-R-68-3] p0608 N73-11069
DRB Aviation Medical Research Unit reports, volume 1, 1964-1968
[DR-208-VOL-1] p0109 N73-15136
Dynamics of the Semicircular canals compared in yaw, pitch and roll
p0109 N73-15137
Predominance of anti-compensatory oculomotor response during rapid head rotation
p0109 N73-15138
The critical dependence of semi-circular canal function upon its physical dimensions
p0109 N73-15139
Disturbance of oculomotor control in flight
p0110 N73-15140
Spatial and dynamic aspects of visual fixation
p0110 N73-15141
Theoretical man machine interaction which might lead to loss of aircraft control
p0110 N73-15142
Influence of eye lid movement upon electro-oculographic recording of vertical eye movements
p0110 N73-15143
The vestibular contribution to stabilization of the retinal image
p0110 N73-15144
Vestibular inaptitude in the environments of flight and space
p0110 N73-15146
Interactions between optokinetic and vestibulo-ocular responses during head rotation in various planes
p0110 N73-15147
Predominant direction of gaze during slow head rotation
p0111 N73-15148
Dependence of visual tracking capability upon stimulus predictability
p0111 N73-15149
Neural reflection of vestibular mechanics
p0111 N73-15150
Some aviation medical aspects of flight crew fatique
p0111 N73-15152
From land to space in a generation: An evolutionary challenge
p0111 N73-15154

JONES, H. G.
Applications of remote sensing in public health.
p0363 A73-39866

JONES, K. N.
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096

JONES, L. G.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117

JONES, N. L.
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068

JONES, R.
Two dimensional eye movement recording using a photo-electric matrix method.
p0121 A73-20259

JONES, R. D.
Perception of symmetrically distributed weight on the head
[AD-748412] p0261 N73-22056

JONES, R. H.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767

JONES, R. L.
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781

JONES, R. M.
Principles of biological regulation: An introduction to feedback systems.
p0283 A73-32576

JONES, W. L.
Atmosphere control
p0106 N73-15108
Current status in aerospace medicine
[AGARD-CP-110] p0265 N73-23057
Recent NASA aerospace medicine technology developments
p0265 N73-23058

JONSSON, A.
Can attention be diverted?
[FOA-2-C-2482-H5] p0611 N73-11092

JORDAN, J. P.
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201

JOSEPH, S.
Cobalt compounds for the control of hypoxic stress.
p0307 A73-34744

JOSEPHSON, M. E.
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843

JOUBERT, J.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651

JOUFFRAY, J.
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917

JUHOS, L.
Body water compartments during bed rest: Evaluation of analytical methods
[NASA-TR-R-406] p0295 N73-24133

JUKES, T. H.
Sequence data - Magnitude and implications of some ambiquities.
p0116 A73-19218

JUNG, W.
Interaction of haemoglobin with ions - Binding of inorganic phosphate to human oxyhaemoglobin.
p0241 A73-29850

JUNGCK, J. R.
Thermodynamics of self assembly - An empirical example relating entropy and evolution.
p0090 A73-17932

JURIST, J. M.
Three models of the vibrating ulna.
p0347 A73-37543

JUSSEAUME, P.
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759

K

KABRISKY, M.
An introduction to a model of the human visual system.
p0309 A73-35239

KACHKO, E. G.
Mathematical description of some visual inertia effects
p0060 A73-15786

KADIN, A. L.
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517

KADYROV, IA. B.
Electronic simulation and analog computer studies of the influence of temperature on the process of nerve impulse shaping
p0430 A73-44725

KADYSKIN, A. V.
Noise and noise sickness
[NASA-TT-P-748] p0365 N73-27935

KADZHAIA, D. V.
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958

KAGAN, V. K.
Foundations of visual information theory
p0060 A73-15784

KAHN, F. D.
Life in the Universe.
p0078 A73-16306

KAISER, D.
Circulation and water balance during immersion in a water bath
[NASA-TT-P-14834] p0185 N73-19124

KAISER, E.
Long-term EEG-telemetry.
p0054 A73-14298

KAISER, H.
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761

KAKIZAKI, H.
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319

KAKURIN, L. I.
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia
p0134 N73-16052
Thirty day experiment with simulation of the physiological effects of weightlessness
p0255 N73-22010
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

KALFAYAN, S. H.
Spacecraft sterilization.
p0243 A73-30137

KALIL, S. E.
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452

KALININA, N. K.
Oxygen consumption and its 'critical' tension for the cerebral cortex in situ
p0164 A73-23801

KALMANSON, D.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505

KALTENBACH, H.
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856

KAMALOV, L. F.
Role of living matter in carbonate formation
[NASA-TT-F-15028] p0375 N73-29046

KAMENKOVICH, V. M.
Binaural interaction during acoustic-stimulus after-perception
p0167 A73-24333

KAMENSKAIA, M. A.
Current views on the mechanism of the quantum-induced liberation of a mediator from the motor nerve endings of a skeletal muscle
p0581 A73-11023

KAMFORINA, S. A.
Elimination of creatinine in the urine during prolonged hypokinesia
p0444 N73-33029

KAMIGAKI, H.
Echocardiographic analysis of mitral valve motion in atrial septal defect.
p0587 A73-12444

KAMKOVSKIY, B. S.
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

KAMMEL, H. H.
Importance of photostimulation in the electroencephalographic study of fliers and candidates at flight schools
p0218 N73-20111

KAMMEL', KH. H.
Photostimulation significance in electroencephalographic examinations of pilots and aviation school applicants
p0209 A73-27717

KAMON, E.
Ladderail and ergometry - A comparative summary.
p0194 A73-25183
Relationship of physiological strain to change in heart rate during work in the heat.
p0283 A73-32548
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418

KAMSHILOVA, E. M.
Effects of space flight factors on Drosophila.
p0397 A73-42173

KAN, G. S.
Synchronism and heterochronism of synkinesis in man
p0336 N73-26089

KANABROCKI, E. L.
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482

KANDA, K.
Contribution of polysynaptic pathways to the tonic vibration reflex.
p0578 A73-10409
Preferred spike intervals in the vibration reflex.
p0578 A73-10410

KANE, J. W.
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609

KANGALEE, H.
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776

KANTOR, S. L.
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617

KAPANADZE T. K.
The effects of electrical activity and excitability of certain limbic and mid-brain structures during various phases of sleep
p0257 N73-22031

KAPELKO, V. I.
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931

KAPLAN, E. IA.
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702

KAPLAN, H. L.
Drug abuse detection efforts
p0228 N73-21117

KAPLAN, I. R.
Distribution and isotopic abundance of biogenic

elements in lunar samples.
p0095 A73-18417

KAPLAN, M. A.
Inability of the submaximal treadmill stress test to predict the location of coronary disease.
p0130 A73-21802

KAPLAN, Y. Y.
Effect of antioxidants on the rate of deoxygenation of blood in animals exposed to a modified atmosphere
p0216 N73-20096

KAPLANSKIY, A. S.
Course of the infectious process and functional activity of pulmonary macrophages in mice confined to an atmosphere with a high oxygen content
p0442 N73-33016

KAPLUNOVSKII, A. S.
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802
Application of factor analysis to the encephalographic characterization of sleep
p0430 A73-44722

KARABUN, P. M.
Age pecularities of whole-blood transketolase activity in healthy persons
p0276 A73-31164

KARAGODINA, A. M.
Preservation of urine in a system for regeneration of water from it
p0183 N73-19099

KARAMIAN, A. I.
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151

KARAMIAN, O. A.
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578

KAREL, M.
Mechanisms of deterioration of nutrients phase 1
[NASA-CR-128915] p0269 N73-23085

KAREVINA, T. G.
The role of the amygdaloid nuclei in the regulation of water intake
p0382 A73-40278

KARIN, B.
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157

KARL, D. E.
Analysis of a display and control system man-machine interface concept. Volume 1: Final technical report
[NASA-CR-128576] p0603 N73-10145
Analysis of a display and control system man-machine interface concept. Volume 2: Appendices A and B
[NASA-CR-128577] p0603 N73-10146
Analysis of a display and control system man-machine interface concept. Volume 3: Appendices C, D and E
[NASA-CR-128578] p0603 N73-10147
Analysis of a display and control system man-machine interface concept. Volume 4: Appendix F
[NASA-CR-128579] p0603 N73-10148

KARLINA, K. V.
Assessment of the thermal resistance of clothing
[DRIC-TRANS-2920] p0067 N73-12117

KARLINER, J. S.
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400

KARLOV, A. A.
Possibility of modeling the relationship between the intracellular potential of individual muscle fibers and the overall electromyogram for tonic muscles
p0165 A73-23810

KARLSSON, J.
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132

KARMANOVA, I. G.
Several methods for comparative physiological study of the stages of natural sleep and wakefulness
p0257 N73-22025

KARNAUKHOV, V. N.
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951

KARPMAN, V. L.
Blood circulation during controlled tachycardia
p0169 A73-24521

KARPOV, A. P.
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anaesthetized rabbits
p0449 N73-33069

KARPOV, Y.
The work and rest regime of cosmonauts
[NASA-TT-F-14990] p0336 N73-26093
Work and rest schedule for cosmonauts
p0416 N73-30984

KARPUKHINA, A. M.
Amplitude discriminator with variable discrimination levels
p0168 A73-24516

KARTASHOV, P. A.
Auto-antibodies of an irradiated organism
p0060 A73-15711

KARTSEV, V. I.
Changes in visual functions after the action of weak vestibular stimuli
p0209 A73-27719
Changes in visual functions after exposure to weak vestibular irritations
p0218 N73-20113

KARVONEN, M. J.
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836

KARZOV, M. V.
Activity variations of some renal enzymes during stepwise increased hypoxia
p0323 A73-36582

KASAI, C.
Multi-information recording and reproduction in the ultrasono-cardio-tonography.
p0239 A73-28581

KASATKIN, A. M.
Modeling complex behavior with the aid of M-automata
p0448 N73-33059

KASATKINA, A. G.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113

KASATKINA, L. M.
Experimental study of a model of motor behavior
p0448 N73-33060

KASAVINA, B. S.
Activity of acid nucleases in eye tissues under the action of corticosteroidal hormones
p0428 A73-44430

KASCH, F. W.
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504

KASHIRIN, V. S.
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure
p0087 A73-17685
Possible role of antitissue autoantibodies in the protective mechanism of local shielding during total irradiation
p0064 N73-12086

KASKEL, D.
Glycogen content in the rabbit retina in relation

to blood circulation.
p0392 A73-41732
KASPEROVICH, A. N.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051
KASSOUNY, M.
Effects of cyclical temperature on vigilance performance
[AD-748451] p0104 N73-14110
KASYAN, I. I.
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079
KATAYAMA, T.
Automatic electrocardiogram interpretation system.
p0056 A73-14660
KATCH, F. I.
Optimal duration of endurance performance on the cycle ergometer in relation to maximal oxygen intake.
p0283 A73-32397
KATCH, V.
Correlational v ratio adjustments of body weight in exercise-oxygen studies.
p0096 A73-18472
KATCH, V. L.
Kinetics of oxygen uptake and recovery for supramaximal work of short duration.
p0198 A73-25648
KATINAS, V. A.
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393
KATKOV, V. Y.
Role of extracardial innervation in compensation of an orthostatic load
p0443 N73-33023
KATKOVSKII, B. S.
Variations in cardiac output and gas exchange at rest during hypokinesia
p0255 N73-22013
Pulmonary volumes of human subjects restricted to an antiorthostatic position with application of different counteracting agents
p0256 N73-22016
Negative pressure on the lower half of the human body and the volume of circulating plasma
p0444 N73-33036
KATSIKAS, J. L.
Role of mineralocorticoids in the natriuresis of water immersion in man.
p0156 A73-22676
KATTUS, A. A.
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
KATZ, R.
The structure of particle tracks.
p0196 A73-25423
KAUFMAN, L.
Stereopsis without image segregation.
p0046 A73-13762
KAUSE, R.
Effect of training on coordinate determination of SLAR (Side-Looking Airborne Radar) imaged features
[AD-762342] p0371 N73-27979
KAVANAGH-GRAY, D.
Left ventricular end-diastolic pressures following selective coronary arteriography.
p0583 A73-11508
KAVKASIDZE, M. G.
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718
The effects of electrical activity and excitability of certain limbic and mid-brain structures during various phases of sleep
p0257 N73-22031
KAWASAKI, K.
Luminance-duration relationship in the human ERG.
p0237 A73-28363
KAYBYSHEV, M. S.
A study of the diurnal fluctuations in the cardiac rhythm as one of the early symptoms of functional insufficiency of the cardiovascular system
p0254 N73-21997
KAZAKHOV, A. I.
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
KAZAKOV, A. I.
Investigation of the effect of increased oxygen concentrations on chlorella metabolism
p0262 N73-23032
KAZAKOV, A. M.
Safety measures in aviation industry
p0312 A73-35869
KAZIN, E. M.
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
KEARNS, M. H.
Evaluation of a device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103
KEELING, M.
The pathology of inactivation in monkeys.
p0314 A73-35983
KEELING, M. E.
Breeding monkeys for biomedical research
p0266 N73-23063
KEENAN, R. L.
Competition between collateral vessels.
p0408 A73-43105
KEENEY, A. H.
Assessment of special visual function.
p0080 A73-16485
KEIJZER, A.
Direct measurement of sensible heat transfer between man and his environment.
p0049 A73-14123
KEKELIIA, B. I.
Hemotherapy of coagulation system disturbances of hepatolienal origin
p0428 A73-44299
KELBAUGH, B. N.
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] p0438 N73-32011
KELLAWAY, P.
The effects of Dalmane /flurazepam hydrochloride/ on human EEG characteristics.
p0126 A73-21464
KELLER, E. L.
Mechanical modeling of eye muscle dynamics.
p0097 A73-18816
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
KELLER, F. W.
Examination of a multiple dipole inverse cardiac generator, based on accurately determined model data.
p0394 A73-41961
KELLERMANN, F.-J.
Spectral sensitivities of colour mechanisms isolated by the human visual evoked response.
p0205 A73-26919
KELLERSHOHN, C.
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
KELLOGG, R. S.
Vestibular influences on orientation in zero gravity, produced by parabolic flight.
p0091 A73-18032
KELLOGG, W. W.
Climate change and the influence of man's activities on the global environment
[PB-213676/2] p0267 N73-23074

KELLY, H. B.
Medication and drugs in aircrew
p0226 N73-21105

KELLY, M. J.
Target acquisition in a restricted visual field.
p0081 A73-16711

KELMAN, G. R.
Mixed-venous oxygen tension by nitrogen rebreathing - A critical, theoretical analysis.
p0094 A73-18336

Submaximal exercise with increased inspiratory resistance to breathing.
p0400 A73-42419

KELSO, J. R.
Effect of hind-limb immobilization on contractile and histochemical properties of skeletal muscle.
p0391 A73-41624

KEMPE, H.
Determination of iodo amino acids in plasma by gel chromatography
p0164 A73-23760

KENDRICK, E.
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250

KENIS, P. R.
Microbial activities in hyperbaric environments
[AD-745334] p0596 N73-10096

KENNEDY, E. E.
Applications of remote sensing in public health.
p0363 A73-39866

KENNEDY, G. A.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085

KENNEDY, R. S.
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and F-3 Navy aircraft.
p0050 A73-14161

Comparative motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130, and F-3 Navy aircraft
[AD-743928] p0596 N73-10100

The relationship between habituation to vestibular stimulation and vigilance: Individual differences and subsidiary problems
[AD-749352] p0103 N73-14108

A bibliography of the role of the vestibular apparatus under water and pressure: Content-oriented and annotated
[AD-750686] p0109 N73-15133

Motion sickness questionnaire and field independence scores as predictors of success in Naval aviation training
p0225 N73-21097

KENNER, W. H.
Impact on a simple physical model of the head.
p0170 A73-24770

KENNEWAY, R. J., III
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012

KENT, B. B.
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475

KENYON, D. J.
Predictive modeling of altitude decompression sickness in humans
[NASA-CR-114550] p0136 N73-16066

KEOSIAN, J.
The origin of life problem - A brief critique.
p0089 A73-17927

KERBER, R. E.
Echocardiographic detection of regional myocardial infarction - An experimental study.
p0281 A73-31997

KERREN, D.
Cerebral tolerance to asphyxial hypoxia in the dog.
p0399 A73-42202

KERN, R.
Behavior of intraocular pressure, blood pressure and body weight under peak physical exertion
[NASA-TT-F-14557] p0608 N73-11071

KERTESZ, A. E.
Central component of fusional response - The effect of stimulus parameters.
p0121 A73-20265

KERTZER, R.
The use of telemetry to obtain physiological data during exercise.
p0052 A73-14278

KESHISHIAN, J. M.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936

KESSLER, E.
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae.
p0287 A73-33226

KESTELOOT, H.
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value.
p0059 A73-15521

KESTER, F. L.
Central waste processing system
[NASA-CR-134048] p0440 N73-32021

KEUL, J.
Intermittent exercise - Metabolites, oxygen pressure, and acid-base equilibrium in the blood.
p0158 A73-22933

KEYS, A.
Predicting coronary heart disease.
p0244 A73-30351

KHACHATUR'IANTS, L. S.
Emotional stresses during a space flight
p0116 A73-19297

Work movement performance of the astronaut in flight.
p0207 A73-27645

KHACHATURYANTS, L. S.
Cosmonaut's emotional stress in space flight
[NASA-TT-F-14654] p0067 N73-12113

Emotional stress during spaceflight
[JPRS-58039] p0148 N73-17104

Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079

Medical and biological problems of space flight
p0224 N73-21091

KHAIRULLINA, A. IA.
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521

KHAIUTIN, V. M.
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820

Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325

Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522

Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570

A mathematical model of the peripheral pain signalization mechanism
p0354 A73-39003

KHAKIMOV, P. A.
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354

KHALFEN, E. SH.
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000

KHALIL, T. M.
Work-rest schedules under prolonged vibration with implications to military operations
p0271 N73-23986

KHAMIDOV, D. KH.
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354

KHAMITOV, KH. S.
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392

KHAN, M. R.
Electrical field distribution in the human body.
p0427 A73-44216
KHANAEVA, Z. S.
Characteristic of collicular responses to stimulation of various sections of the visual afferent pathway in cats
p0078 A73-16332
KHANANASHVILI, M. M.
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570
KHANDELWAL, G. S.
Proton dosimeter design for distributed body organs.
p0424 A73-43389
KHANSON, K. P.
Information macromolecules during radiation injury to cells
p0060 A73-15707
KHARCHENKO, P. D.
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281
KHASABOV, G. A.
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
KHASABOVA, V. A.
Intercortical functional connections in lower monkeys, Macacus rhesus, exhibited by evoked responses
p0080 A73-16693
KHAZANOV, V. S.
Measurements of the photosynthetically active radiation in forests with an intensity meter
p0379 N73-29337
KHELIMSKII, M. A.
Some biomechanical properties of the pelvic girdle of man
p0045 A73-13743
KHELKOVSKIY-SERGEYEV, M. A.
Health evaluation of electron beam welding of beryllium bronze
p0190 N73-19531
KHENOKH, M. A.
Abiogenic radio-chemical synthesis of deoxynucleosides.
p0396 A73-42166
KHIBSELI, A. I.
Some dactyloscopic indications of congenital vitium cordis
p0581 A73-11080
KHLAPONINA, V. P.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
KHLEBNIKOV, G. P.
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079
KHMEL'KOV, V. P.
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
KHMELKOV, V. P.
Prolonged monitoring of human cardiac bioelectric activity during ground experiments and in space flight
p0065 N73-12095
KHOLIAVKA, V. M.
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
KHOLIKOVA, I. A.
Effects of space flight factors on Drosophila.
p0397 A73-42173
KHOLODILOV, IU. M.
Experimental investigation of the characteristics of the visual recognition of images
p0428 A73-44667
KHONEEIKI, T. L.
Variability of normal glabellar and supraorbital reflexes in man
p0045 A73-13748
KHONIAKOV, K. P.
A study of the radioprotective action of a polymer salt of cystamine and sulphopropyl ester of dextran
[DRIC-TRANS-2963] p0108 N73-15125
KHRUNOV, E. V.
Analysis of the extravehicular activity of an astronaut
p0314 A73-36116
Some psychological and engineering aspects of the extravehicular activity of astronauts.
p0396 A73-42167
KHRUNOV, Y. V.
Interaction of man-machine systems
[JPRS-58290] p0178 N73-18136
Some psychological engineering and psychophysiological aspects of the activity of a cosmonaut-operator during docking and ship-to-ship transfer
p0178 N73-18137
Medical and biological problems of space flight
p0224 N73-21091
KHURGIN, IU. I.
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
KHURSIN, M. IU.
Desoxyribonucleases in sweat gland secretion of man
p0429 A73-44674
KIANIAN, K.
Three models of the vibrating ulna.
p0347 A73-37543
KIDD, B. S. L.
Time course of pulmonary vascular response to hypoxia in dogs.
p0120 A73-20168
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction.
p0169 A73-24565
KIDERA, G. J.
Hypoglycemia in airline pilots.
p0326 A73-36790
Management of cataract in commercial flight personnel.
p0329 A73-36927
KIETZMAN, M. L.
Visual temporal integration for threshold, signal detectability, and reaction time measures.
p0235 A73-28097
KIKLEVICH, IU. M.
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
KIKUCHI, Y.
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
KIKVIDZE, M. G.
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856
KIM, B. M.
Analysis of pressure waves as a mean of diagnosing vascular obstructions.
p0346 A73-37524
KIM, C.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] p0612 N73-11097
KIM, J.-K.
Evolution of ribonuclease in relation to polypeptide folding mechanisms.
p0057 A73-15047
KIMBALL, K. A.
Differential velocity and time prediction of motion.
p0285 A73-32900
KIMBALL, S. L.
Active plant growth at freezing temperatures.
p0203 A73-26486
KIMMICH, H. P.
Biotelemetry; Proceedings of the International Symposium, Nijmegen, Netherlands, May 5-8, 1971.
p0052 A73-14276
Single to seven channel lightweight biotelemetry system.
p0052 A73-14281
Telemetry of respiratory air flow.
p0053 A73-14286

Investigations during exercise with an improved PO2 telemetry system.
p0053 A73-14287
Oxygen consumption measurements during exercise by means of radiotelemetry.
p0053 A73-14288
Telemetry of biomechanical forces during exercise.
p0054 A73-14296

KINZEY, S. L.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
Functional preservation of vascular smooth muscle tissue
[NASA-CR-128897] p0267 N73-23069

KING, E. G.
Evaluation of positive end-expiratory pressure in hypoxemic dogs.
p0360 A73-39781

KING, J.
Diagnostic value of vectorcardiogram in strictly posterior infarction.
p0047 A73-13891

KING, J. H.
Evaluating head protecting devices.
p0286 A73-33132

KING, P. F.
Aeromedical aspects of vibration and noise
[AGARDOGRAPH-151] p0148 N73-17098
Hearing conservation in aircrew and ground support personnel
p0148 N73-17101

KING, R. F.
An anthropomorphic master-slave manipulator system.
p0344 A73-37316

KINGABY, G. L.
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161

KINI, P. H.
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.
p0399 A73-42341

KINKADE, R. G.
Human engineering guide to equipment design (revised edition)
[AD-758339] p0296 N73-24140

KINNEY, J. A. S.
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
The visual evoked cortical response as a measure of stress in naval environments: Methodology and analysis. 2: Rapid flash rates
[AD-744934] p0595 N73-10088
Further tests of training techniques to improve visual-motor coordination of Navy divers underwater
[AD-744936] p0605 N73-10163
Visual evoked responses for divers breathing various gases at depths to 1200 feet
[AD-749325] p0108 N73-15127

KINNEY, J. H.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172

KIPP, J. E.
Performance and life support in altered environments
[AD-754216] p0224 N73-20157

KIRCHHOFF, H. W.
The impact of diurnal rhythm on drug dosing and drug evaluation
p0228 N73-21119

KIRILLOV, O. I.
Morphological changes in the suprarenals of rats during hypokinesia
p0254 N73-22003

KIRSCH, H.
Tasks of concentration under psychical stress
p0368 N73-27957

KIRSCH, K.
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098

KISELEV, A. A.
Physiological problems of prolonged weightlessness
[NASA-TT-F-14672] p0149 N73-17110

KISELEV, B. I.
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095

KISELEV, E. K.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019

KISLIAKOV, IU. IA.
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572

KISLOVSKAYA, T. A.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019

KISSEN, A. T.
Preflight heat stress and recovery
[AD-759173] p0338 N73-27060

KISSIN, B.
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225

KITZING, J.
Input and output in the system of thermoregulation during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074

KIWULL, P.
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502

KJELLBERG, A.
Effects of 24-hour sleep deprivation on rate of decrement in a 10-minute auditory reaction time task.
p0058 A73-15220

KLASCIUS, A.
Microwave radiation hazards around large microwave antenna.
p0343 A73-37274

KLEIN, H.-M.
Accuracy of saccadic eye movements and maintenance of eccentric eye positions in the dark.
p0245 A73-30390

KLEIN, K. E.
Prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance.
[DFVLR-SONDDR-268] p0050 A73-14158
The prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance
p0227 N73-21112
Current scientific papers from the Aerospace Medical Institute
[DLR-FB-73-15] p0367 N73-27951
Resynchronization of diurnal performance rhythms after transmeridian flights
p0368 N73-27958
Changes in the 24-hour rhythm after two transatlantic flights in rapid sequence
p0369 N73-27964

KLEIN, M.
Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284

KLEIN, R.
A dynamic response and eye scanning data base useful in the development of theories and methods for the description of control/display relationships
p0600 N73-10124

KLEIN, T. J.
Relating operator capabilities to system demands.
p0082 A73-16722

KLEINMAN, D. L.
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587

Modeling the human in a time-varying anti-aircraft tracking loop.
p0352 A73-38071
Analytic evaluation of display requirements for approach to landing
p0599 N73-10121
Prediction and analysis of human performance in a VTOL hover task
p0601 N73-10134
Current status of models for the human operator as a controller and decision maker in manned aerospace systems
p0270 N73-23897

KLEINMAN, K. M.
Inter-hemispheric transfer of meaningful visual information in normal human subjects.
p0119 A73-20123

KLEINMAN, L. I.
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623

KLEINWAECHTER, H.
Operation of spacecraft in orbit with the aid of remote-controlled manipulators - A joint project of ERNA, KYBERTHONIC, KLERA
[DGLR PAPER 72-098]
p0584 A73-11659

KLEITMAN, N.
Contribution to the study of factors controlling the rate of summation of luminous impressions from unequal surfaces (retinal heterogeneity)
[NASA-TT-F-15124]
p0440 N73-32017

KLEMM, F. K.
Utility of heat stress indices and effect of humidity and temperature on single physiologic strains.
[AD-751735]
p0576 A73-10163
Preflight heat stress and recovery
[AD-759173]
p0338 N73-27060

KLEMPARSKAIA, N. N.
Auto-antibodies of an irradiated organism
p0060 A73-15711
Possible role of antitissular autoantibodies in the protective mechanism of local shielding during total radiation exposure
p0087 A73-17685

KLEMPARSKAYA, N. N.
Possible role of antitissue autoantibodies in the protective mechanism of local shielding during total irradiation
p0064 N73-12086

KLETT, A. T.
Application of remote sensing techniques for appraising changes in wildlife habitat
p0142 N73-16396

KLEVTSOV, V. P.
Structure of the memorization process and its modeling
p0061 A73-15793

KLIMENKO, V. M.
Statistical investigation of the impulse activity of neurons in various hypothalamic regions
p0164 A73-23802

KLIMOVSKAIA, L. D.
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
On correlation between the changes in cerebellar bioelectric activity and the adaptive reactions under the effect of accelerations.
p0328 A73-36915

KLIMOVSKAIA, L. D.
Cerebellar reactions during different regimes of rotation of animals on a centrifuge
p0262 N73-23030

KLINE, J. M.
Pilot performance as a function of three types of altitude displays
[ASD-TR-72-63]
p0074 N73-13117

KLINE, J. S.
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610

KLINGER, K.-P.
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
The objectivization of the effect of load and stress on an information-reception process of man with the aid of acoustically evoked potentials
p0122 A73-20389
Amplitude variations of acoustically evoked potentials as a function of signal information and fatigue due to stress
p0352 A73-38161
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157

KLINKER, L.
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357

KLISSOURAS, V.
Adaptation to maximal effort - Genetics and age.
p0361 A73-39792

KLUGER, M. J.
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156

KLUVER, H. D. R.
Direct measurement of sensible heat transfer between man and his environment.
p0049 A73-14123

KLYGUL', T. A.
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549

KNAPP, C. F.
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
[ASME PAPER 72-WA/BHP-11]
p0061 A73-15878
Changes in whole body force transmission of dogs exposed repeatedly to vibration.
p0355 A73-39106

KNAPP, S. C.
A systems approach for the evaluation of protective helmets.
p0284 A73-32655

KNEPTON, J.
Direction-specific adaptation effects acquired in a slow rotation room.
p0049 A73-14154
Direction-specific adaptation effects acquired in a slow rotation room
[NASA-CR-129063]
p0591 N73-10062

KNETS, I. V.
Experimental determination of shear moduli in a compact bone tissue
p0045 A73-13742
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996

KNIGHT, V.
Prodromal disease: Immune responses of the host macrophage system to humoral factors
[NASA-CR-133455]
p0365 N73-27938

KNOEBEL, S. B.
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543

KNOELL, A. C.
Unified approach to the biomechanics of dental implantology
p0191 N73-19977

KNOWLER, A. M.
The second noise and social survey around Heathrow, London airport.
p0041 A73-12980

KNOWLES, W. B.
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243

KNOX, F. S., III
Realistic evaluation of fabrics for thermal protective clothing.
p0285 A73-32671

KNUTTGEN, H. G.
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131

Effect of training with eccentric muscle contractions on skeletal muscle metabolites.
p0390 A73-41523

KOBBERMANN, T.
Mechanisms of oxygen toxicity at the cellular level [AD-758725]
p0299 N73-25124

KOBLIANSKII, V. V.
Functional state alteration of the visual analysor in pilots
p0093 A73-18257

KOBRINSKII, A. Y.
Second Symposium on the Theory and Principles of Manipulator Design (February 8-9, 1968)
p0335 N73-26074

Features of the kinematics of manipulators and volumes methods
p0335 N73-26075

KOBZEVA, L. I.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712

Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106

KOCHERGA, D. O.
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles
p0084 A73-16735

KOCHERGIN, A. V.
A method for the approximation of processes in homogeneous biological structures
p0428 A73-44663

KOCIBA, H. J.
Toxicological evaluation of a beryllium motor exhaust product [AD-756531]
p0259 N73-22042

KOCHAR, K.
Telemetrical measurements during sport performance on sportsmen with cardiac arrhytmias.
p0054 A73-14294

KODAMA, A. H.
Radioisotopic T-3 and T-4 thyroid function tests in the pig-tailed monkey /Macaca nemestrina/.
p0588 A73-12548

A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963

Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982

KOELZER, W.
Radiation protection at the work site; Scientific, technical and organizational aspects; Annual Scientific Conference, 6th, Karlsruhe, West Germany, May 17-19, 1972, Reports
p0195 A73-25310

KOENIG, E.
Differential effects of central versus peripheral vision on egocentric and exocentric motion perception.
p0201 A73-26221

KOERNER, F.
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600

KOETEL, G.
Whole body counter efficiency calculations for distributed sources in a human phantom [KFKI-72-30]
p0067 N73-12114

KOFANOV, Y. B.
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems
p0336 N73-26090

KOGAN, A. B.
Electrophysiological indices of sleep in the cerebral cortex
p0257 N73-22026

KOGANOVSKAIA, M. M.
Cardiac output and oxygen transport in early ontogenesis
p0084 A73-16738

KOHLHOFFEL, L. U. E.
A study of basilar membrane vibrations. I - Fuzziness-detection: A new method for the analysis of microvibrations with laser light.
p0581 A73-10973

KOKUSHO, S.
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900

KOL'CHENKO, N. V.
Effect of prolonged hypokinesia on the higher nervous activity of humans
p0428 A73-44668

KOL'S, O. R.
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082

KOLAK, A.
Changes in the peripheral blood of the rat exposed to microwave radiation /2400 MHz/ in conditions of chronic exposure.
p0387 A73-41159

KOLB, V. G.
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174

KOLBANOV, V. V.
Effect of visual work on the optic papilla
p0080 A73-16694

KOLCHIN, Y. V.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113

KOLESINA, N. B.
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240

Investigation of decontaminating properties of sorbents used in the life support system of spaceships
p0374 N73-29038

KOLESNIK, F. A.
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169

KOLESNIKOV, A. K.
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645

KOLESOVA, V. A.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029

KOLFF, W. J.
Biomedical engineering support [COO-2155-4]
p0102 N73-14095

KOLIN, A.
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992

KOLLIAS, J.
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794

KOLOMENSKII, A. V.
Physical and radiobiological investigations on artificial earth satellites [AD-756771]
p0294 N73-24126

KOLOMNIETS, Y. V.
Ischemic heart disease and cosmic radiation [NASA-TT-F-14992]
p0334 N73-26065

KOLOSKOVA, Y. S.
Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028

KOLOSOVA, L. I.
Technique for measuring the vessel blood pressure in long continued experiments
p0279 A73-31394

Participation of the hypophysis and adrenal glands in intra-ocular pressure regulation
p0402 A73-42661

KOLOSOVA, T. S.
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696

Influence of hypoxia on the release of certain gaseous wastes in white rats
p0304 A73-34228
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101
Influence of hypoxia on elimination of some gaseous products of vital functions in white rats
p0372 N73-29025

KOLOTILOV, N. N.
Safety measures in aviation industry
p0312 A73-35869

KOLPAKOV, E. G.
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841

KOLTUN, E. I.
Biomedical problems of space flights: Index of domestic and foreign literature
p0062 A73-16034

KOLTUN, V. M.
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167

KOLTUN, Y. I.
Medical-biological problems of spaceflight: An index to the Russian and foreign literature
[NASA-TT-F-14662] p0265 N73-23053

KOMARDENKO, N. I.
Neurological fatique-indices of flight crews of long-range and military transport aviation
p0193 A73-25040

KOMAR, V. E.
Information macromolecules during radiation injury to cells
p0060 A73-15707

KOMAROVA, D. P.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057

KOMAROVA, S. M.
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090

KOMENDANTOV, G. L.
Problem of acceleration in aviation medicine. Part 3: Functional changes in the nervous system during G-loads and weightlessness
[NASA-TT-F-733] p0148 N73-17105
Problems of aviation medicine
[NASA-TT-F-687] p0252 N73-21981
The effect of increased pressure in the cavities of the alimentary tract on evoked reflexes. Report 1: The effect on caloric nystagmus
p0253 N73-21983
The effect of increased pressure in the cavities of the alimentary tract on evoked reflexes. Report 2: The effect on proprioceptive cervical and lumbar compensatory reflexes
p0253 N73-21984
Changes of compensatory proprioceptive evoked reflexes during hypoxia
p0253 N73-21992

KOMI, P. V.
Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle.
pG580 A73-10774

KOMMERELL, B.
The incidence of abnormal liver function tests in drug addicts without a history of jaundice
[NASA-TT-F-15041] p0374 N73-29044

KOMMERELL, G.
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456

KOMODA, M. K.
Some observations concerning saccadic eye movements.
p0245 A73-30389

KOMOGORTSEVA, N. A.
Changes in the quantity of overall sulfhydryl groups in the blood of persons coming in contact with microwave radiation sources
p0277 A73-31169

KOMOLOVA, G. S.
DNA catabolism in rat tissues in response to transverse accelerations
p0087 A73-17679
DNA catabolism in the organs of rats under the influence of transversely directed accelerations
p0063 N73-12080
Action of a set of extremal factors on ribonuclease
p0185 N73-19120
Effect of a gas environment on catalase cryolysis
p0185 N73-19121

KOMPANETS, V. S.
Conditioned-reflex motion sickness as a method of evaluating the statokinetic resistance of the flight personnel
p0254 N73-21994

KONZALOVA, G. M.
Peculiarities of human skin reactions to lotions of different composition during hypokinesia
p0444 N73-33034

KONDRAT'EV, P. P.
Binary regularities in the electrical wave spectrum of the brain
p0588 A73-12557

KONDRAT'EVA, L. M.
Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683

KONDRATIEVA, L. M.
Relationship between impulse activity of bulbar respiratory neurons, electric activity of respiratory muscles and pulmonary ventilation accompanying depressed respiration
p0064 N73-12084

KONNOVA, M. I.
Influence of shielding certain parts of the body on the course of radiation sickness in dogs with total gamma irradiation
p0213 N73-20073
Reaction of the peripheral blood in dogs under the complex action of transverse overloads and gamma irradiation
p0214 N73-20083

KONOPKIN, O. A.
Psychological problems of activity regulation
p0393 A73-41884
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893

KONOVALOV, V. F.
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

KONSTANTINOV, B. P.
The populated cosmos
p0345 A73-37398

KONYCHEV, A. A.
Classification of sources of contaminants
p0193 A73-25037

KONZ, S.
The effect of illumination level, stroke width and figure ground on legibility of NAMEL numbers.
p0083 A73-16729

KONZA, E. A.
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840

KOOIJMAN, J. M.
Influence of nonideal flow conditions in haemodialysers on mass-transfer theories.
p0403 A73-42678

KOPALADZE, R. A.
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082

KOPANEV, V. I.
The problem of organism responsiveness in aviation medicine
p0193 A73-25039

Ideas of K. E. Tsiolkovskiy and modern points of view on the mechanisms of the influence of weightlessness p0371 N73-29022

KOPOLKOV, V. I.
Negative pressure on the lower half of the human body and the volume of circulating plasma p0444 N73-33036

KOPP, C. V.
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975

KOPPENHAGEN, K.
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange. p0381 A73-40274

KOPYEV, V. N.
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role of partial shielding in the attenuation of radiation damage p0214 N73-20076

KOPYLOV, IU. A.
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion p0080 A73-16696

KORDA, P.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems p0255 N73-22008

KORENEV, G. V.
Movements of a man to reach a specified goal. p0058 A73-15207

KORNUSHKO, O. V.
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods p0163 A73-23676

KORIDZE, M. G.
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep p0429 A73-44718

KORINEVSKII, A. V.
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus p0362 A73-39803

KORNER, P.
Optokinetic stimulation of an immobilized eye in the monkey. p0318 A73-36457

KORNILOVA, L. N.
Effect of antiradiation drugs on the functional condition of the vestibular analysor p0279 A73-31509
Study of reactions of human otorhinolaryngological organs during hypokinesia p0256 N73-22015
Effect of radioprotectants on functional state of the vestibular analyzer p0263 N73-23033

KOROBKOV, A. V.
Effect of immersion on certain motor function indices p0180 N73-19081

KOROBOVA, A. A.
Effect of immersion on certain motor function indices p0180 N73-19081

KORGL'KOV, V. I.
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability p0124 A73-20988
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses p0305 A73-34232

KOROLEV, B. A.
Evaluating the efficiency of man-machine systems p0414 N73-30087

KOROLKOV, V. I.
Effect of a gas mixture with an increased oxygen and carbon dioxide content on man's orthostatic tolerance p0135 N73-16055
Influence of stepped adaptation to high-mountain conditions on the respiratory function and acid-alkali equilibrium in the blood during different motor activity regimes of subjects p0372 N73-29030

KOROTKII, V. P.
Study of the influence of weak electromagnetic field gradients on man p0157 A73-22850
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain p0395 A73-41964

KOROTKOV, A. D.
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems p0336 N73-26090

KORSAK, V. L.
Vitamin metabolism alteration under increased atmospheric pressure p0193 A73-25036

KORSHUNOVA, G. F.
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system p0306 A73-34240
Investigation of decontaminating properties of sorbents used in the life support system of spaceships p0374 N73-29038

KORZ, E.
Renin-angiotensin system in simulated hypervolemia induced by immersion
[NASA-TT-F-14885] p0258 N73-22036

KORZHUEV, P. A.
Problem of hemoglobin oxygenation p0426 A73-43929

KORZHUYEV, P. A.
Evolution, gravitation, weightlessness
[NASA-TT-F-730] p0107 N73-15116

KOSHCHEEVA, L. A.
The radiobiological effects of heavy ions on mammalian cells and bacteria. p0398 A73-42182

KOSIKOV, K. V.
Effects of space flight factors on the heredity of higher and lower plants. p0397 A73-42168

KOSOLAPOV, G. A.
Changes in the nuclei of liver cells during the action of transverse stresses on animals p0181 N73-19086

KOSOVICH, J.
Operating room environment control. Part A: A valve cannister system for anesthetic gas adsorption. Part B: A state-of-the-art survey of laminar flow operating rooms. Part C: Three laminar flow experiments p0231 N73-21141

KOSTANDOV, E. A.
Role of associations in the formation of evoked potentials from the human cerebral cortex p0362 A73-39798

KOSTINA, L. N.
Effects of space flight factors on the heredity of higher and lower plants. p0397 A73-42168

KOSTIS, J. B.
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography. p0583 A73-11509

KOSTIUK, O. I.
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects p0170 A73-24597

KOSTIUK, P. G.
Structural characteristics of connections between medial efferent systems and spinal cord neurons p0156 A73-22577

KOSTIUKOV, A. I.
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funicuis of the cat spinal cord p0118 A73-20002

KOSTUK, W. J.
Left ventricular performance after myocardial

infarction assessed by radioisotope angiocardiography.
p0130 A73-21801

KOTCHEN, T. A.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Thyroid responses to simulated altitude.
p0157 A73-22926
Effect of altitude on renin-aldosterone system and metabolism of water and electrolytes.
p0400 A73-42420

KOTLIAREVSKII, E. V.
Physiological shifts in the human organism under increased neuropsychic stresses
p0345 A73-37392

KOTOK, V. S.
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799

KOTOVSKAIA, A. R.
Change in the capacity of man to withstand transverse stresses after hypodynamia of varying duration
p0181 N73-19083

KOTOVSKII, Y. P.
Changes in the nuclei of liver cells during the action of transverse stresses on animals
p0181 N73-19086
Effect of hyperoxic medium on cells, tissues and organs of experimental animals
p0182 N73-19091
Problems of Space Biology. Volume 15: Functional morphology during extremal actions
[NASA-TT-F-738] p0185 N73-19126

KOUKOL, H. C.
Microbiological sampling of spacecraft cabling, antennas, solar panels and thermal blankets
[NASA-CR-130383] p0149 N73-17109

KOVAL', IU. F.
Acceleration of the elimination of radioactive isotopes from the organism
p0590 A73-12865

KOVAL'SKAIA, N. I.
Histochemical investigation of some energy metabolism characteristics in a rat heart after acute fatique
p0278 A73-31393

KOVALENKO, E. A.
Tissue oxygen in the presence of extremal flight factors
p0116 A73-19425
Problems of gasdynamics theory in the organism
p0169 A73-24523

KOVALENKO, O. A.
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104

KOVALENKO, Y. A.
Problems of space biology. Volume 21: Tissue oxygen under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065

KOVALEV, Y. Y.
Physical and radiobiological investigations on artificial earth satellites: Estimating the radiation hazard of space flights
[NASA-TT-F-724] p0173 N73-18098

KOVALEVA, N. T.
Mechanism of 'readjustment' of aorta baroreceptors during hypertonia
p0401 A73-42655

KOVALIOV, E. E.
Physical and radiobiological investigations on artificial earth satellites
[AD-756771] p0294 N73-24126

KOVROV, B. G.
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
Quantitative evaluation of gas exchange of a continuous culture of higher plants as a link in a life support system
p0063 N73-12081

KOWALSKY, N.
Dynamics of the Semicircular canals compared in yaw, pitch and roll
p0109 N73-15137

KOYAL, S. N.
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785

KOZACHA, P. G.
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196

KOZAR, M. I.
Fourth All-Union Conference on Space Biology and Medicine
[JPRS-58345] p0176 N73-18125
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113
Bactericidal activity of the human skin at different times of day
p0218 N73-20110
Fourth All-Union Conference on Space Biology and Aerospace Medicine
p0264 N73-23045

KOZAR', M. I.
Bactericide activity of the integument of man at different times of the day
p0209 A73-27716

KOZHARSKII, L. A.
Simple inductive interaction between man and objects and events
p0447 N73-33058

KOZHEVNIKOV, V. A.
Study of the peripheral auditory adaptation in a psycho-acoustic experiment
p0164 A73-23807

KOZHURA, V. L.
RNA and DNA of internal organs during a remote postreanimation period in animals with complete and incomplete functional recovery of the central nervous system
p0249 A73-30842

KOZIN, V. M.
Method of tone and speech audiometry in the medical examination of flight personnel
p0253 N73-21990

KOZINETS, G. I.
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511
Effect of protein quality in the ration of rats on their tolerance of acute hypoxia
p0263 N73-23035

KOZLOV , IU. P.
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082

KOZLOV, A. N.
Parameter selection for Doppler ultrasonic heart and vessel locators
p0087 A73-17682
Selection of parameters of cardiovascular system ultrasonic Doppler probes
p0063 N73-12083

KOZLOV, B. V.
Cerebral hemodynamics during 120 day clinostatic hypokinesia
p0256 N73-22020

KOZLOV, N. B.
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749

KOZLOV, V. A.
Chemical protection in mixed gamma-neutron irradiation with different neutron contributions in the absorbed dose
[DRIC-TRANS-2961] p0108 N73-15124
Influence of monosodium salt of beta-aminoethylthiophosphoric acid on the resistance of animals to transversely directed overloads
p0211 N73-20056
Influence of radioprotectors from the aminothiol group on the cardiac function of guinea pigs under the influence of overloads
p0211 N73-20057

Chemical protection against mixed gamma-neutron radiation with various contributions of neutrons to the absorbed dose p0212 N73-20068
Rate of recovery of radioresistance with the combined application of ionizing radiation and dynamic flight factors on the organism p0214 N73-20080
Influence of cystamine combined with sympathomimetic amines on reparative processes following the action of radiation and overloads p0214 N73-20081
Magnitude of the irreversible portion of radiation damage with the combined action of radiation and acceleration p0214 N73-20082
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions p0215 N73-20085

KOZLOWSKI, S.
Thermoregulation during physical exercises of men with diverse physical performance capacities [NASA-TT-F-15142] p0437 N73-32003

KOZYREVSKAYA, G. I.
Peculiarities of water-mineral metabolism during 120-day hypokinesia p0443 N73-33028

KRACHUN, G. P.
Structural organization and electrophysiological properties of the intercentral functional systems of the hypothalamic region of the brain p0581 A73-11024

KRAFT, W.
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods. p0054 A73-14305

KRAMER, H.
Reliability of electromyographic measurements by means of surface electrodes p0058 A73-15520

KRAMING, K. K.
Heat conduction in blackened skin accompanying pulsatile heating with a xenon flash lamp. p0361 A73-39791

KRASAVIN, E. A.
The radiobiological effects of heavy ions on mammalian cells and bacteria. p0398 A73-42182

KRASAVIN, I. N.
Soviet cybernetics review (selected articles) [AD-751145] p0178 N73-18143

KRASHNYKH, N. G.
The effect of some radioprotective preparations on the motor and evacuator function of the gastrointestinal tract of healthy and irradiated rats [DRIC-TRANS-2962] p0229 N73-21130

KRASNOLOBOV, A. G.
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions p0215 N73-20085

KRASNOSHCHEKOV, V. V.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products p0124 A73-20984
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system p0306 A73-34240
Advanced methods of recovery for space life support systems. p0347 A73-37711
Radiation oxidation of water impurities in moisture-containing products of man's vital functions p0134 N73-16051
Investigation of decontaminating properties of sorbents used in the life support system of spaceships p0374 N73-29038

KRASNOVA, A. F.
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity p0322 A73-36571

KRASNOVA, A. N.
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation p0382 A73-40282

KRASNOVSKII, A. A.
Abiogenic formation of porphin, chlorin and bacteriochlorin. p0090 A73-17934

KRASNYKH, I. G.
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/ p0305 A73-34234
Effect of accelerations on reactivity of the gastro-intestinal tract to pharmacological agents p0181 N73-19085
Influence of certain radioprotective preparations on the motor-evacuatory function of the gastrointestinal tract of healthy and irradiated rats p0212 N73-20062
Chemical protection against mixed gamma-neutron radiation with various contributions of neutrons to the absorbed dose p0212 N73-20068
Effect of decompression of the lower half of the body on the condition of the human cardiovascular system (based on X-ray kymography data) p0373 N73-29032

KRAUS, E. F.
A parametric study of pilot performance with modified aircraft control dynamics, varying navigational task complexity, and induced stress [AD-764760] p0441 N73-32025

KRAUSE, H. E.
Interrelationship between gravity and mechanical impedance of supine humans p0368 N73-27963

KRAUSKOPF, J.
Reaction time as a measure of the temporal response properties of individual colour mechanisms. p0046 A73-13757

KRAUSS, R. W.
A study of phycophysiology in controlled environments [NASA-CR-135796] p0445 N73-33039

KRAUZ, E. I.
Characteristics of spontaneous oxygen tension variations in human brain structures p0249 A73-30844

KRAUZ, V. A.
Effect of ethimizol on short term memory and mental working capacity p0092 A73-18160

KRAY, W. C.
Chemical volatilization as a technique for the detection of extraterrestrial biopolymers and possible metabolic products. p0202 A73-26479

KRAYENBUEHL, H. P.
Isovolumic contraction dynamics in man according to two different muscle models. p0576 A73-10158
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man. p0209 A73-27888

KRAYEV, I. N.
Some results of the development and investigation of instruments for monitoring the cardiovascular system [NASA-TT-F-14492] p0604 N73-10154

KRAZESKY, A.
Computer-aided ECG analysis and research in a clinical setting. p0059 A73-15648

KREBS, M. J.
Estimating the detectability of target luminances. p0093 A73-18242

KREIFELDT, J. G.
Pilot performance during a simulated standard instrument procedure turn with and without a predictor display [NASA-TM-X-62201] p0150 N73-17118

KREKELER, H.
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274

KREL, A. A.
Methods of determination of hydroxyproline in biological fluids and their use in clinical practice
[NASA-TT-F-15093] p0417 N73-30997

KRENEN', M. A.
The dynamics of operative images in extrapolation tracking processes
p0393 A73-41866

KRETZ, A.
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524

KREULEN, T. H.
Ventriculographic patterns and hemodynamics in primary myocardial disease.
p0130 A73-21804

KREUZER, F.
Telemetry of respiratory air flow.
p0053 A73-14286
Investigations during exercise with an improved PO2 telemetry system.
p0053 A73-14287
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620

KREUZER, P.
Aerobic capacity of relatively sedentary males.
p0353 A73-38360

KRIEGER, A. J.
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162

KRIKLER, D. M.
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582

KRILL, A. E.
Clinical aspects of night vision.
p0079 A73-16480
Abnormal color vision.
p0079 A73-16482

KRIPPNER, S.
Clairvoyant perception of target material in three states of consciousness.
p0044 A73-13555

KRISHCHIAN, E. N.
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751

KRISS, J. P.
Video instrumentation for radionuclide angiocardiography.
p0348 A73-37796

KRISTOFFERSON, A. B.
Response delays and the timing of discrete motor responses.
p0387 A73-41177

KRIVISKII, A. S.
Radiation genetics of microorganisms
p0060 A73-15701

KROE, D. J.
Animal pathology resulting from long term exposure to low levels of monomethylhydrazine
[AD-751441] p0139 N73-16086

KROHNE, H. W.
The effect of anxiety control on the level of information processing
p0425 A73-43848

KROKHMAL', S. S.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736

KROL, J. P.
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases.
p0247 A73-30515

KROLL, P.
Contribution of the anticipation stress to total flight stress and its dependence on diurnal rhythm, measured by physiological parameters
[DLR-FB-72-39] p0412 N73-30071

KROPF, A.
The structure and reactions of visual pigments.
p0160 A73-23306

KROTOVA, N. B.
Determining copper, iron, cobalt, nickel and manganese in biological samples of plant origin
p0256 N73-22022

KRUEGER, H.
On the approximation of the optical modulation transfer function /MTF/ by analytical functions.
p0121 A73-20264

KRUEGER, W.
Investigation of the binary selectable control gain in the case of a positioning problem
p0284 A73-32583

KRUGLOV, Y. V.
The ammonifying ability of the denitrifying bacteria of the species pseudomonas fluorescens
[NASA-TT-F-15086] p0412 N73-30068

KRUPINA, T. N.
Changes in cerebral, pulmonary and peripheral blood circulations
p0255 N73-22012
State of blood filling and bioelectric activity of the brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic-vascular dysfunction
p0443 N73-33027

KRUSE, W.
Investigation of the binary selectable control gain in the case of a positioning problem
p0284 A73-32583

KRUTZ, R. W., JR.
Aeromedical evaluation of the phased-dilution concept for oxygen breathing systems
p0266 N73-23065

KRYGER, N.
Gas diffusion across collateral channels.
p0048 A73-14113

KRYLOV, Y. V.
Study of features of high intensity noise effects during spaceflight
p0180 N73-19080

KRYTER, K. D.
Impairment to hearing from exposure to noise.
p0287 A73-33676

KRYUCHKOV, V. A.
Peculiarities of determining the oxidizability of water during its regeneration
p0183 N73-19104
Study of the technology of decontamination of water which has been regenerated from the liquid products of human vital functions
p0183 N73-19105

KRYZHANOVSKAIA, L. M.
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

KUBANEISHVILI, E. S.
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal
p0245 A73-30387

KUCHERENKO, E. P.
Subcellular changes in the motor region of the cortex during sleep
p0257 N73-22028

KUCHIN, N. N.
Ischemic heart disease and cosmic radiation
[NASA-TT-F-14992] p0334 N73-26065

KUDINA, L. P.
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle
p0170 A73-24599

KUDRIASHOV, B. I.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
KUDRIASHOVA, V. A.
Prospects for studying mechanisms responsible for the nonthermal effects of millimeter- and submillimeter-band electromagnetic radiation on biologically active compounds
p0427 A73-44096
KUDRIAVTSEVA, N. N.
Serotonin content in various parts of the brain during hibernation and awakening
p0278 A73-31390
Serotonin content variations in the fore-brain during hibernation
p0322 A73-36567
KUDRIN, I. D.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227
Central nervous system reaction to mechanical factors
p0372 N73-29024
KUDROVA, N. V.
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089
KUDRYASHOV, Y. I.
Influence of the discontinuity between two media on the distribution of absorbed energy in a charged particle track
p0372 N73-29028
KUECHLER, G.
Reliability of electromyographic measurements by means of surface electrodes
p0058 A73-15520
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034
KUEHNE, T. E.
Color naming latencies with brief exposures of individual Stroop and control stimuli [AD-745106]
p0596 N73-10094
KUEHSCHNER, D.
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162
Eye function and the illumination of instrument dials in aircraft
p0409 A73-43133
Practical aspects of color vision and its disturbances
p0179 N73-19067
KUGATH, D. A.
Experiments evaluating compliance and force feedback effect on manipulator performance [NASA-CR-128605]
p0603 N73-10151
KUHLTHAU, A. R.
Investigation of traveler acceptance factors in short haul air carrier operations
p0591 N73-10023
Analysis of passenger acceptance of commercial flights having characteristics similar to STOL [NASA-CR-132285]
p0367 N73-27950
KUHNEN-CLAUSEN, D.
Pharmacological investigation of the parasympatholytical effect of mono and bisquaternary pyridinium compounds on the isolated guinea pig ileum [BMVG-FBWT-72-14]
p0138 N73-16075
KUHNEN, H.
Inhibiting and activating effect of mono- and bi-quaternary pyridine oxime reactivators and related compounds on structure-bound acetyl-choline esterase in vitro [BMVG-FBWT-72-9]
p0187 N73-19138
KUIPER, J.
Ways to avoid noise and artefacts when using telemetry.
p0054 A73-14295
KUKLINSKI, P.
Changes in the 24-hour rhythm after two transatlantic flights in rapid sequence
p0369 N73-27964
KUKUSHKIN, A. K.
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
KUL'KOVA, N. V.
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials
p0087 A73-17681
KULAKOV, F. M.
Prospects for the building and use of computer controlled manipulators
p0335 N73-26079
Robot-manipulator control algorithms [JPRS-59717]
p0375 N73-29051
KULAKOV, V. P.
The dynamics of operative images in extrapolation tracking processes
p0393 A73-41886
KULAKOVA, R. I.
Hypertonia and atherosclerosis under high mountain conditions [NASA-TT-F-745]
p0176 N73-18121
KULESHOV, V. S.
Some construction principles for remote control imitative manipulators [NASA-TT-F-14889]
p0232 N73-21152
Principal parameters and operating indices for reversible follow-up systems
p0335 N73-26081
KULESHOVA, T. F.
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165
KULIK, A. M.
Correlation between the impulse activity of bulbar respiratory neurons, the electrical activity of respiratory muscles, and pulmonary respiration volume during obstructed respiration
p0087 A73-17683
Relationship between impulse activity of bulbar respiratory neurons, electric activity of respiratory muscles and pulmonary ventilation accompanying depressed respiration
p0064 N73-12084
KULIKOWSKI, J. J.
Linear summation of spatial harmonics in human vision.
p0345 A73-37411
KULKIN, S. G.
Influence of pharmacochemical substances on the reactivity of the organism to the combined action of gamma radiation and transverse overloads
p0215 N73-20086
KULKOVA, N. V.
Polyurethane foam sterilization by the gas method.
p0395 A73-42160
KULWICKI, P. V.
The high q approach [AD-757216]
p0295 N73-24138
KUMANICHKIN, S. D.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227
Central nervous system reaction to mechanical factors
p0372 N73-29024
KUMAR, S.
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
KUMASZKA, P.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757
KUMETS, P. I.
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Condition of the vestibular analyzer in dogs after prolonged irradiation in small doses
p0181 N73-19088
Effect of radioprotectants on functional state of the vestibular analyzer
p0263 N73-23033
KUNNAPAS, T.
Interindividual differences in homomodal and

heteromodal scaling.
p0204 A73-26750

KUNZ, H.
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique
p0153 A73-21871

KUO, P. T.
Plasma lipids and atherosclerosis.
p0320 A73-36533

KUPEL, H. E.
The toxicity of pyrolysis products from a chlorotrifluoroetyhylene-ethylene copolymer (Halar resin)
[AD-751436]
p0138 N73-16080

KUPFER, D. J.
Rapid eye movement analyzer.
p0156 A73-22697

KUPPRAT, I.
Oscillations in oxygen consumption of man at rest.
p0241 A73-29755

KURCHAVYI, G. G.
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578

Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942

A transistor amplifier for microelectrode circuitry with an extended range of applicability
p0430 A73-44723

KURDIAEV, K. V.
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196

KURENKOV, G. I.
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525

KURIOKA, Y.
Analysis of contrast and assimilation effects on the basis of receptive field models.
p0123 A73-20812

KURNATOVSKI, V.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems
p0255 N73-22008

KURPERSHOEK, C. J.
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.
p0094 A73-18335

KUSHNER, V. P.
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638

KUSICHEVA, E. A.
Abiogenic radio-chemical synthesis of deoxynucleosides.
p0396 A73-42166

KUSTOV, L. A.
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749

KUSTOV, V. V.
Biological effect of a fine sample of lunar soil returned to earth by the automatic station Luna 16.
p0056 A73-14569

Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676

Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions
p0063 N73-12077

Certain peculiarities of the biological action of gaseous toxic substances which are discharged into the atmosphere from the urine and feces
p0182 N73-19097

Effect of a chemical preservative on the intensity of the discharge of certain gaseous toxic substances from stored urine
p0183 N73-19098

The resistance of animals to toxic action of certain gases after adaptation to hypoxia
p0183 N73-19100

The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101

Problem to toxicity of exhaled air
p0183 N73-19103

Influence of certain radioprotectors on the ability of white rats to withstand acute hypoxia
p0211 N73-20059

The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness
p0215 N73-20087

Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats
p0254 N73-22004

Effect of preliminary exposure to carbon monoxide on development of hypokinetic disorders in white rats
p0255 N73-22007

Influence exerted on the animal body by continuous and discontinuous exposure to carbon monoxide
p0442 N73-33019

KUSUMI, F.
Maximal oxygen intake and nomographic assessment of functional aerobic impairment in cardiovascular disease.
p0202 A73-26362

KUTEPOV, V. V.
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525

KUVAYEV, A. Y.
Role of extracardial innervation in compensation of an orthostatic load
p0443 N73-33023

KUYAMA, T.
Studies of blood gas analysis at abnormal environment.
p0582 A73-11210

KUZ'MICH, N. S.
Evaluation of the state of the cardiovascular system from polycardiographic test data
p0088 A73-17749

KUZ'MIN, IU. IA.
Analysis of the spectra in a 'man-machine' system
p0159 A73-22971

KUZ'MIN, M. P.
Retinal vessel reactions and intraocular tension in humans staying in a horizontal position for 120 days
p0280 A73-31514

KUZ'MINA, L. M.
Analysis of the spectra in a 'man-machine' system
p0159 A73-22971

KUZ'MINA, T. D.
Auto-antibodies of an irradiated organism
p0060 A73-15711

KUZIURINA, L. A.
On the multiplication of xerophilic micro-organisms under simulated Martian conditions.
p0396 A73-42165

KUZMIN, M. P.
Reactions of eye retinal vessels and intraocular pressure during man's 120 day restriction to a horizontal position
p0263 N73-23038

KUZMINA, A. P.
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085

KUZNETS, I. I.
Change in calcium content in human bone tissue accompanying thermal stress
p0444 N73-33033

KUZNETSOV, A. G.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990

Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057

KUZNETSOV, O. N.
Psychoneurological problems in man's adaptation to modified diurnal regimes
p0444 N73-33031
KUZNETSOV, V. S.
Study of features of high intensity noise effects during spaceflight
p0180 N73-19080
KUZNETSOVA, Y. I.
Changes in vector cardiograms after glucose tests in civil aviation flight personnel with atherosclerosis
p0253 N73-21989
KVASOVA, N. N.
Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030
KVENVOLDEN, K. A.
Criteria for distinguishing biogenic and abiogenic amino acids - Preliminary considerations.
p0202 A73-26480
KYLIN, B.
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772
KYLSTRA, J. A.
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
KYNGE, P. K.
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085

L

L'VOVA, T. S.
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090
LA POSTA, A.
Base composition of ribosomal RNA and evolution.
p0116 A73-19220
LABADIE, M.
Studies on pre-biological evolution. 3: Black azulmic acids obtained from ammonium cyanide
[NASA-TT-F-14640] p0070 N73-13089
LABETS, K. S.
Soviet cybernetics review (selected articles)
[AD-751145] p0178 N73-18143
LABUZA, T. P.
Storage stability and improvement of intermediate moisture foods
[NASA-CR-133978] p0366 N73-27944
LACEY, J. C., JR.
Concepts related to the origin of the genetic apparatus.
p0055 A73-14317
Proteins and nucleic acids in prebiotic evolution.
p0090 A73-17937
LACK, L. C.
Amplitude of visual suppression during the control of binocular rivalry.
p0311 A73-35491
LACONTI, A. B.
Development of sulfonated polyphenylene oxide membranes for the reverse osmosis purification of wash water at sterilization temperatures /165 F/.
[ASME PAPER 73-ENAS-16] p0350 A73-37973
LACROIX, P. G.
Speech discrimination in noise and hearing loss at 3000 Hertz
[AD-752974] p0298 N73-25118
LADDU, A. E.
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
LAFFERTY, J. F.
Effect of hypergravity on the circadian rhythms of white rats.
[ASME PAPER 72-WA/BHF-14] p0061 A73-15877
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
A model to predict the mechanical impedance of the sitting primate during sinusoidal vibration.
[ASME PAPER 73-DET-78] p0395 A73-42073
LAFFONT, P.
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
LAFONTAINE, E.
The significance of pendulum nystagmography in aviation medicine
p0330 A73-36941
Developments as regards maximum visual acuity with age among cockpit crew members.
p0387 A73-41164
LAGET, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160
LAGET, P.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540
LAGRANGE, H.
Retinal adaptation
[NASA-TT-F-15036] p0450 N73-33074
LAHIRI, S.
Dynamic aspects of regulation of ventilation in man during acclimatization to high altitude.
p0042 A73-13500
Ventilatory responses to transient hypoxia and hypercapnia in man.
p0275 A73-31126
LAI, D. C.
Application of frequency discrimination technique to the analysis of electroencephalographic signals.
p0057 A73-15052
Application of frequency discrimination technique to the analysis of electroencephalographic signals
[NASA-CR-129173] p0611 N73-11091
LAIDLAW, W. E.
Handling qualities and realistic training.
p0083 A73-16733
LAIKEN, N.
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
LAIKEN, S.
A rapid method for frontal plane axis determination in scalar electrocardiograms.
p0243 A73-30063
LAIRY, G. C.
A vecto-oculographic approach to fast sleep eye movements in man.
p0242 A73-29994
LAJTHA, L. G.
The birth of blood cells
p0085 A73-17473
LAKE, P.
Development of neurosurgical instrumentation and procedures for emergency use in null and low-gravity environments - A speculative approach.
p0196 A73-25342
LAKOTA, N. A.
Some construction principles for remote control imitative manipulators
[NASA-TT-F-14889] p0232 N73-21152
Some remotely controlled master-slave manipulator design problems
p0335 N73-26076
LALAIAN, A. A.
Visual after-images in athletes and coaches as a prestart condition index
p0092 A73-18161
LAMBERT, R. K.
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
LAMBERTSEN, C. J.
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.

p0326 A73-36795
Body fluid volume changes during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36796
Pulmonary mechanical functions in man breathing dense gas mixtures at great depths
[AD-749028] p0100 N73-14082

LANNEVIK, S.
The effect of ignition of small quantities of initiators in laboratory vessels of glass and polythene
[ERDE-TRANS-1] p0295 N73-24137

LANY, M.
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160

LANCASTER, M. C.
Prevention of the atherosclerotic diseases - Opportunities for military medicine.
p0248 A73-30518
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342

LANDGREBE, D. A.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064

LANDIERI, P. C.
Evaluation of laser eye protectors commercially available
[AD-746293] p0612 N73-11100

LANDONNE, M.
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506

LANE, J. C.
Monocular pilots - A followup study.
p0387 A73-41163

LANE, S. H.
Some aspects of individual differences in schematic concept formation
[AD-744781] p0260 N73-22052

LANGE, G.
Electroradiography - Some remarks on its technique and future.
p0427 A73-44214

LANGE, K. O.
Gravity selection by animals in fields of centrifugal acceleration superimposed on weightlessness during sounding rocket flights.
p0582 A73-11209

LANGE, L.
Studies in stress-relaxation and distensibility characteristics of small skin veins in vivo by a combined photoelectric-photographic and plethysmographic technique.
p0084 A73-17098

LANGE, R. V.
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416

LANGE, W.
Investigations concerning perception levels and transferred vibrational forces in the case of a vertical action of periodic vibrational mixtures on man
p0047 A73-13818

LANGMAN, M. J. S.
Blood groups and plasma cholesterol esterification.
p0408 A73-43106
Blood group A sub-groups and serum cholesterol.
p0408 A73-43107

LANGWORTHY, H.
Evaluation of Marine Corps battery powered electrically heated diving dress
[AD-749847] p0102 N73-14101

LANPHIER, E. H.
Human respiration under increased pressures.
p0205 A73-26924

LANSBERG, M. P.
Predictability of motion sickness in the election of pilots
[AGARD-CP-109] p0225 N73-21092

LANSING, R. W.
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013

LANYI, J. K.
Studies of the electron transport chain of extremely halophilic bacteria. VIII - Respiration-dependent detergent dissolution of cell envelopes.
p0579 A73-10625
Structure of the lipid phase in cell envelope vesicles from Halobacterium cutirubrum.
p0306 A73-34599

LAPAEV, E. V.
Experimental-mathematical analysis of the effects of rotational accelerations on the vestibular apparatus
p0303 A73-34120

LAPPIN, J. S.
On the rate of acquisition of visual information about space, time, and intensity.
p0311 A73-35496
Sufficient conditions for the discrimination of motion.
p0388 A73-41181

LARGE, J. B.
Human response to transportation noise and vibration.
p0310 A73-35328

LARIN, A. P.
Absorption and utilization of solar energy by crops under various growth conditions
p0378 N73-29321

LARIN, V. V.
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734

LARKIN, E. C.
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Red blood cell density and volume changes in man exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072

LARSON, T. P.
Regenerative particulate filter development
[NASA-CR-115505] p0268 N73-23084

LARSSON, L. E.
Ambient temperature rise effects on pilot performance in a flight simulator
p0331 A73-36948

LASETER, J. L.
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Volatile terpenoids from aeciospores of Cronartium fusiforme.
p0206 A73-27145
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
Analysis of chemical components from plant tissue samples
[NASA-CR-128740] p0186 N73-19131

LASSER, E. C.
Electrofluoroplanigraphy.
p0389 A73-41216

LATASH, K. P.
Several aspects of the functional interdependence of delta sleep and radio sleep
p0257 N73-22027

LATEGOLA, M. T.
The use of simple indicators for detecting potential coronary heart disease susceptibility in the third-class airman population.
p0328 A73-36912

LATHROP, G. D.
Drug abuse detection efforts
p0228 N73-21117

LATTA, J. N.
Evaluation of holographic elements in a heads-up display
[AD-758057] p0295 N73-24139

LATTO, R.
Frontal eye-field lesions in monkeys.
p0317 A73-36446

LAU, S. H.
Alternative mechanisms of apparent supernormal atrioventricular conduction.
p0165 A73-23843

LAUBACH, G. E.
Space Shuttle Orbiter ECLSS.

[ASME PAPER 73-ENAS-23] p0350 A73-37979
LAUBACH, L. L.
Anthropometry of US Army aviators, 1970
[AD-743528] p0605 N73-10162
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
LAUDISIO, P. C.
Hazard evaluation of a gallium arsenide diode array laser
[AD-762277] p0370 N73-27975
LAURIG, W.
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
Heart rate variability and work-load measurement.
p0250 A73-30879
An analysis of heart rate variability.
p0250 A73-30882
Serial correlation of physiological time series and its significance for a stress analysis
p0352 A73-38159
LAUTA, A. D.
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
LAUTSEVICHUS, L. Z.
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
LAVA-SANCHEZ, P. A.
Base composition of ribosomal RNA and evolution.
p0116 A73-19220
LAVEN, H. B.
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Response of coronary blood flow to pH-induced changes in hemoglobin-O2 affinity.
p0433 A73-45061
LAVERSON, J. I.
The employment of a spoken language computer applied to an air traffic control task.
p0083 A73-16728
LAVIE, P.
Spiral aftereffect durations following awakening from REM sleep and non-REM sleep.
p0388 A73-41179
LAVY, S.
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
LAWLER, G. C.
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
LAWLESS, J. G.
Thermal synthesis of amino acids from a simulated primitive atmosphere.
p0306 A73-34572
LAWRENCE, R. W.
Reverse osmosis for wash water recovery in space vehicles.
[ASME PAPER 73-ENAS-12] p0349 A73-37971
LAWS, P.
Investigations regarding auditory depth perception and the problem of in-head localization of acoustic events
p0240 A73-29278
LAZAR, K. V.
Differences in the speed of mentally processing displays containing information about right and left
[AD-759723] p0334 N73-26070
LAY, C. D.
A comparative study of female and male air traffic controller trainees
[PAA-AM-72-22] p0611 N73-11094
LAZAREV, N. V.
The oxides of manganese: Their comparative toxicity and hygienic importance and the clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067
LAZRIEV, I. L.
Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem
p0118 A73-19650
LAZZARA, R.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085
LAZZARI, J. O.
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
LE COCQ, A. D.
Perceptual considerations for a wide field of view, helicopter night landing system /HENILAS/.
p0081 A73-16705
LEACH, C. S.
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Hematological, biochemical, and immunological studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36794
Endocrine studies during a 14-day continuous exposure to 5.2% O2 in N2 at pressure equivalent to 100 FSW /4 ata/.
p0326 A73-36795
Proceedings of the 1971 Manned Spacecraft Center Endocrine Program Conference
[NASA-TM-X-58093] p0173 N73-18104
Endocrine laboratory results Apollo missions 14 and 15
p0173 N73-18105
Dissociation of effects of prolonged confinement and bedrest in normal human subjects: Heart rate and body temperature
p0175 N73-18113
Dissociation of effects of prolonged confinement and bed rest in normal human subjects; cortisol, insulin, thyroxine, and triiodothyronine
p0175 N73-18114
LEAMAN, D. M.
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
LEARY, J. A.
Characterization and properties of medical grade Pu-238 fuels
[LA-DC-72-473] p0067 N73-12115
LEATHERMAN, M. E.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
LEBAN, M. I.
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964
LEBEDEV, S. I.
Absorption and utilization of solar energy by crops under various growth conditions
p0378 N73-29321
LEBEDEV, V. I.
Psychological compatibility in interplanetary flight
[JPRS-57878] p0106 N73-15113
Psychological characteristics of the activity of cosmonauts
[NASA-TT-F-727] p0229 N73-21129
LEBEDEV, V. M.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
LEBEDEV, V. P.
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
LEBEDEVA, E. K.
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
LEBEDEVA, Y. K.
Studies of the stability of the chemical composition of a chlorella biomass during its

prolonged cultivation with recovery of the medium on nitrates
p0184 N73-19108
Investigation of the effect of increased oxygen concentrations on chlorella metabolism
p0262 N73-23032

LEBEDINSKII, A. V.
General regularities of the reaction of the human organism to the combined influence of environmental factors characteristic for a spacecraft cabin
[NASA-TT-F-15020] p0374 N73-29041

LEBINSKIY, S. V.
General regularities of the reaction of the human organism to the combined influence of environmental factors characteristic for a spacecraft cabin
[NASA-TT-F-15020] p0374 N73-29041

LEBLANC, A.
A new method of measuring arterial dilation and its application.
p0402 A73-42669

LEBOVITZ, R. M.
Caloric vestibular stimulation via UHF-microwave irradiation.
p0163 A73-23650

LECAM, L. M.
Proceedings of the 6th Berkeley Symposium on Mathematical Statisitics and Probability. Volume 5: Darwinian, neo-Darwinian, and non-Darwinian evolution
[NASA-CR-131508] p0229 N73-21131

LECAM, M.
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911

LECHEVALLIER, C.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540

LECHEVALLIER, MR.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

LECLERC, J. P.
Hepatic lesions observed among flight crews following aviation accidents
p0330 A73-36933

LECOCQ, P. R.
Estimates of physiologic reserve after acceleration exposure in man
p0188 N73-19150

LEDEBERG, J.
Cytochemical studies of planetary microorganisms - Explorations in exobiology
[NASA-CR-133272] p0338 N73-27059

LEE, A. B.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172

LEE, D.
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522

LEE, G.
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography.
p0583 A73-11509

LEE, G. B.
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544

LEE, J. M.
Responses of midbrain cells to blur.
p0583 A73-11503

LEE, R. A.
The effects of vibration on vision as applied to military vehicles
[AD-750345] p0114 N73-15172

LEE, R. D.
The application of aerospace technology to patient monitoring.
p0285 A73-32804

LEE, T. Y.
Phase progression of the QRS complexes in electrocardiograms versus the inscribing directions of the QRS loops in vectorcardiograms.
p0286 A73-33116

LEGATO, M. J.
Ultrastructure of the atrial, ventricular, and Purkinje cell, with special reference to the genesis of arrhythmias.
p0097 A73-18873

LEGEN'KOV, V. I.
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710

LEGENKOV, V. I.
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104

LEGUAY, G.
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs
p0585 A73-12151
Valvular cardiopathies and tolerance to flight
p0115 A73-19209
Renal lithiasis among military operating aircrew
p0128 A73-21537
Proteinuria and military aircrew
p0128 A73-21539
Possibility of predicting predisposition of motion sickness in the selection of pilots
p0225 N73-21094
Antidiabetic medications and navigation personnel
p0228 N73-21120

LEHWALT, M. E.
Biological effects of fuel and exhaust components from spacecraft descent engines employing hydrazine
[NASA-TM-X-2714] p0107 N73-15118

LEIBOWITZ, H. W.
Sensory, learned, and cognitive mechanisms of size perception.
p0091 A73-18031

LEIBRECHT, B. C.
Auditory feedback and conditioning of the single motor unit
[AD-745107] p0605 N73-10165

LEIGHTON, S. B.
Servo-controlled moving stimulus generator for single unit studies in vision.
p0246 A73-30401

LEJNI, G.
Effects of beta-blocking agents on atrio-ventricular and intraventricular conduction in man.
p0390 A73-41564

LEKAREVA, T. A.
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676
Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions
p0063 N73-12077
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats
p0254 N73-22004

LEKSTMAN, G. A.
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167

LEKOS, D.
Orthogonal versus planar vector-electrocardiography.
p0118 A73-19930

LELORD, G.
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759

LEMAIRE, C.
The capacity for muscular work in acute hypoxia
p0331 A73-36946

LEMAIRE, R. M.
The optimization of form
p0227 N73-21114

LEMELIN, J.
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334

LEBESH, G. A.
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101

LEBESHEVA, L. M.
The early recognition of latent coronary insufficiency in flight personnel with the aid of combined functional loading
p0253 N73-21988

LEBFANT, C. J.
Cyclical variations in FRC and other respiratory variables in resting man.
p0278 A73-31346

LEBKOVA, N. I.
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571

Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660

LEBSKAYA, G. N.
Blood supply to the skeletal muscles of rats during hypokinesia
p0442 N73-33018

LEBTSHEE, A. A.
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239

Study of the species composition of enteric bacilli during prolonged confinement of man in a closed space
p0373 N73-29037

LEBZ, M. W.
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992

LEON, A. S.
Drug therapy of power failure.
p0321 A73-36546

LEONARD, J. J.
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645

LEONARDSON, R. O.
Preliminary report on use of Lahey clinic automated history in an idustrial complex
p0144 N73-17060

LEONOV, A. A.
Psychological compatibility in interplanetary flight
[JPRS-57878] p0106 N73-15113

Psychological characteristics of the activity of cosmonauts
[NASA-TT-F-727] p0229 N73-21129

LEONT'EVA, G. A.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180

LEOPOLD, G.
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400

LERMAN, J. B.
Robot vision
[NASA-CR-133458] p0365 N73-27936

LESOGOR, L. V.
Study of the peripheral auditory adaptation in a psycho-acoustic experiment
p0164 A73-23807

Functional model of the frequency channel of the peripheral auditory analysor
p0164 A73-23808

LESTER, J. W.
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073

LETKOVA, L. I.
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693

Use of multichannel rheography in physiological investigations on a centrifuge
p0065 N73-12094

LETZING, W. G.
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640

LEUNG, H. C.
Effects of heat stress on performance.
p0096 A73-18473

LEUSHINA, L. I.
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331

Retention of information in the iconic visual memory during recognition of images of varying complexity
p0199 A73-26084

Independence of the recognition of some spatial properties of an image
p0206 A73-27109

LEVERETT, S. D., JR.
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754

Estimates of physiologic reserve after acceleration exposure in man
p0188 N73-19150

The use of physiological protective maneuvers in high acceleration environments
p0189 N73-19156

LEVI, R. J.
The differential electrocardiographic manifestations of heniblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523

LEVICK, W. R.
Receptive fields of retinal ganglion cells.
p0161 A73-23315

LEVIN, K.
The evaluation of air-to-air combat situations by Navy fighter pilots with artificial intelligence applications
[AD-747519] p0068 N73-12119

LEVIN, R. A.
Effect of cultural conditions on the fatty acid composition of Thiobacillus novellus.
p0045 A73-13599

LEVIN, V. L.
Problem of the survival of microorganisms under conditions simulating those on Mars
p0185 N73-19116

LEVIN, W. C.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565

LEVINA, E. N.
The oxides of manganese: Their comparative toxicity and hygienic importance and the clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067

LEVINE, H.
Circadian rhythms of the circulatory system. Literature review: Computerized case study of transmeridian flight and medication effects on a mildly hypertensive subject
[AD-743300] p0595 N73-10090

LEVINE, J. M.
Effects of ancillary information upon photointerpreter performance.
p0093 A73-18245

Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778

LEVINSON, J. Z.
Interpretation of generator potentials.
p0160 A73-23309

LEVISON, W. H.
A control theory model for human decision making
p0597 N73-10107

LEVIT, B. Y.
An approach to the construction of a formal model of behavior
p0447 N73-33055

LEVY, J.
Autokinesis direction during and after eye turn.
p0235 A73-28098

LEW, G. M.
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120

LEWIN, R.
Is anyone out there.
p0387 A73-41175

LEWINSOHN, G. H.
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415

LEWIS, B. S.
Systolic time intervals in constrictive pericarditis and severe primary myocardial disease.
p0086 A73-17596

LEWIS, F. J.
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533

LEWIS, H. F.
Frequency of anti-collision observing responses by solo pilots as a function of traffic density, ATC traffic warnings, and competing behavior.
p0387 A73-41158

LEWIS, H. J.
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417

LEWIS, S. T.
Barotrauma in United States Air Force accidents/incidents.
p0387 A73-41160

LEWIS, T. H.
Toxicology of atmospheric sulfur dioxide decay products
p0099 N73-14071

LEWIS, W. F.
A brief guide to the units and the interpretation of blood alcohol measurements
[DCIEM-TM-848] p0175 N73-18120

LEXA, J.
An electrocardiograph amplifier which satisfies the stringent requirements of long-term monitoring of cardiac activity
p0166 A73-23849

LEZHIN, I. S.
Organization of the experiments and overall condition of the subjects
p0255 N73-22011

LI, Y.-S.
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114

LIAKH, L. O.
Changes in indices of the carbohydrate and fat metabolism, the state of the sympathoadrenal system, and oxidative processes under varying-intensity cold effects
p0429 A73-44671

LIARSKII, P. P.
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680

LIAUDIS, V. IA.
Structure of the memorization process and its modeling
p0061 A73-15793

LIBERT, J. P.
Role of the arterial chemoreceptors in ventilatory adaptation to hypoxia of awake dogs and rabbits.
p0201 A73-26220

LICHTLEN, P.
Coronary heart disease; Proceedings of the Second International Symposium, Frankfurt am Main, West Germany, June 1972.
p0405 A73-42856

LIDDY, B. S. L.
Colour vision in the Canadian Armed Forces
p0179 N73-19070

LIDSTROM, I.-M.
Changes in the vibratory sensation threshold after exposure to powerful vibration.
p0580 A73-10772

LIEBERT, F.
Do microbes reduce phosphate?
[NASA-TT-F-14724] p0069 N73-13081

LIEDTKE, A. J.
Geometry of left ventricular contraction in the systolic click syndrome - Characterization of a segmental myocardial abnormality.
p0097 A73-18870

LIFSCHITZ, M. D.
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650

LIKAR, I.
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541

LIKHACHEV, IU. P.
Influence of rare-earth metal dust containing radioactive components on the development of reticulosarcoma of the lungs
p0163 A73-23680

LIKHNITSKAIA, I. I.
Human adaptability
p0584 A73-11921

LIKHODID, V. S.
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513

LIKHTENSHTEIN, A. O.
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645

LIKOFF, W.
Atherosclerosis and coronary heart disease.
p0320 A73-36531

The prognosis of myocardial infarction.
p0321 A73-36549

LIMONCELLI, D. D.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545

The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

LIN, K. H.
A model of time-varying gas exchange in the human lung during a respiratory cycle at rest.
p0129 A73-21615

LINDBERG, R. G.
Inversion of lighting regimen alters acrophase relations of circadian rhythms in body temperature, heart rate and movement of pocket mice.
p0357 A73-39480

LINDELL, K. F.
New formaldehyde base disinfectants.
p0424 A73-43276

LINDQUIST, V. A. I.
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369

LINDSAY, P. H.
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895

LINDSAY, S. J. E.
Flight deck environment and pilot workload - Biological measures of workload.
p0347 A73-37732

LINDSLEY, D. B.
Polysensory responses and sensory interaction in pulvinar and related postero-lateral thalamic nuclei in cat.
p0156 A73-22696

Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647

LING, S. C.
A nonlinear analysis of pulsatile flow in arteries.
p0579 A73-10449

Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640

LINHART, P.
The incidence of abnormal liver function tests in drug addicts without a history of jaundice
[NASA-TT-F-15041] p0374 N73-29044

LINIUCHEVA, L. A.
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696

LINKENBACH, H.
Circulation and water balance during immersion in

a water bath
[NASA-TT-F-14834] p0185 N73-19124
LINNARSSON, D.
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
LINTZ, L. B.
Relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance
[AD-759583] p0337 N73-26096
LIPANA, J. G.
An operating environmental health program
p0147 N73-17093
LIPANOVICH, M. I.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045
LIPMAN, R. L.
Estimates of physiologic reserve after acceleration exposure in man
p0188 N73-19150
LIPMANN, F.
A mechanism for polypeptide synthesis on a protein template.
p0090 A73-17943
LIPPERT, H.
Stress recovery of human tendons after relief - Mechanical recovery
p0119 A73-20033
LIPPINCOTT, E. R.
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484
LIPS, K. W.
An unstable steering task with a sonic boom disturbance
[UTIAS-TN-179] p0612 N73-11098
LIPSETT, D.
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
LISHCHUK, V. A.
Formalization of an arterial pressure stabilization system
p0168 A73-24467
LISIN, V. V.
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677
LISKOV, M. A.
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134
LISOVSKII, G. M.
Quantitative estimation of the gas metabolism of continuous higher plant cultures as a life support system component
p0087 A73-17680
LISOVSKIY, G. M.
Quantitative evaluation of gas exchange of a continuous culture of higher plants as a link in a life support system
p0063 N73-12081
LISPER, H.-O.
Effects of 24-hour sleep deprivation on rate of decrement in a 10-minute auditory reaction time task.
p0058 A73-15220
LISTON, E.
The effect of low visibility on the performance of vehicle operators
[AD-749248] p0260 N73-22051
LITSOV, A. M.
Investigation of the sleep and wakefulness rhythms in the crewmembers of Soyuz-3 through Soyuz-9 spacecraft prior to, during, and after space flight
p0170 A73-24697
Rhythm of sleep and wakefulness in crews of the spaceships Soyuz 3-9 before, during and after exposure to spaceflight
[JPRS-58173] p0137 N73-16068
Investigation of the rhythm of sleep and wakefulness in crews of the spaceships Soyuz 3-9 before, during and after exposure to spaceflight
[NASA-TT-F-15103] p0375 N73-29048
Psychoneurological problems in man's adaptation to modified diurnal regimes
p0444 N73-33031
LITTLE, L. J.
The design of analysis of a human body motion measurement system
[AD-751134] p0142 N73-16104
LITTLE, R. W.
Inter-hemispheric transfer of meaningful visual information in normal human subjects.
p0119 A73-20123
LITTMANN, D.
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
LITVINOV, A. M.
The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information.
p0207 A73-27646
LITVINTSEV, A. I.
Vertical posture control mechanisms in man.
p0585 A73-12119
LIU, P. F.
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] p0439 N73-32015
LIU, Y. K.
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429
LIUBINA, B. G.
Blood circulation during controlled tachycardia
p0169 A73-24521
LIVANOV, M. N.
The problem of memory
p0194 A73-25198
LIVANOVA, I. A.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
LIVINGSTON, S. D.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056
LIVINGSTONE, S. D.
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534
LIVOHA, J.
Polyvinylpyrrolidone used as cryoprotective substance for erythrocyte preservation
[NASA-TT-F-14590] p0069 N73-13076
LIZ'KO, N. N.
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239
LIZKO, N. N.
Study of the species composition of enteric bacilli during prolonged confinement of man in a closed space
p0373 N73-29037
LLORENTE, S.
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
LLOYD, A. J.
Auditory feedback and conditioning of the single motor unit
[AD-745107] p0605 N73-10165
LOATS, H. L., JR.
Study of astronaut restraints and mobility aids in a weightless shirtsleeve environment
[NASA-CR-128590] p0603 N73-10150
LOBACHEV, V. I.
Some construction principles for remote control imitative manipulators
[NASA-TT-F-14889] p0232 N73-21152
Some remotely controlled master-slave manipulator design problems

p0335 N73-26076

LOBZHANIDZE, N. G.
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856

LOBZIN, P. P.
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089

LOCHER, P. J.
Influence of stimulus symmetry on visual scanning patterns.
p0311 A73-35494

LOEB, M.
Influence of observing strategies and stimulus variables on watchkeeping performances.
p0580 A73-10771
Implications of measurement of eye fixations for a psychophysics of form perception.
p0234 A73-28092

LOEPPKY, J. A.
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463

LOGINOVA, E. V.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123

LOGINOVA, N. K.
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325

LOGINOVA, Y. V.
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005

LOH, G. M.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045

LOHMANN, R.
Prebiotic activation processes.
p0383 A73-40372

LOMOV, B. F.
Some characteristics of pilot's performance under complicated flight conditions.
p0328 A73-36921
Ergonomic prerequisites for artistic designing
p0413 N73-30080

LONG, G. M.
The isolation of critical elements within selected maneuvers during primary flight training.
p0083 A73-16727

LONG, N.
Stereoscopic depth aftereffects with random-dot patterns.
p0308 A73-34841

LONG, R. A.
Microbial response to space environment, part B
p0232 N73-21762
Infectivity and egg production of Nematospiroides dubius as affected by space flight and ultraviolet irradiation
p0291 N73-24106

LOOMIS, J. L.
A system for automatic end-tidal gas sampling at rest and during exercise.
p0362 A73-39794

LOPATCHENKO, B. K.
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
Introduction of a metric into the visual field
p0432 A73-44906

LORGE, J. D.
Operant behavior of rhesus monkeys in the presence of extremely low frequency low intensity magnetic and electric fields, experiment 1
[AD-754058] p0230 N73-21134

LOSEV, A. A.
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509
Effect of radioprotectants on functional state of the vestibular analyzer
p0263 N73-23033

LOSKUTOVA, Z. F.
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391

LOTH, D.
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910

LOUHIJA, A.
Early diagnosis of coronary heart disease; Proceedings of the Second Paavo Nurmi Symposium, Porvoo, Finland, September 9-11, 1971.
p0404 A73-42826

LOURENCO, R. V.
Force output of the diaphragm as a function of phrenic nerve firing rate and lung volume.
p0360 A73-39780

LOVE, T. J.
A comparison of predicted skin temperatures with thermographic measurements.
p0395 A73-42053

LOVEGROVE, W.
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415

LOVEGROVE, W. J.
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196

LOVELL, M. D.
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations.
p0310 A73-35460

LOW, E.
A system for validating human reliability data
[AD-744551] p0594 N73-10085

LOY, S. L.
Relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance
[AD-759583] p0337 N73-26096

LOZINA-LOZINSKIY, L. K.
Cryobiological studies and space biology problems
[JPRS-59129] p0265 N73-23055
Cryobiological studies and space biology problems
[JPRS-59129] p0293 N73-24120

LOZOVAIA, G. I.
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950

LU, M.
Mechanisms of oxygen toxicity at the cellular level
[AD-758725] p0299 N73-25124

LUCCHESI, R. A.
U-2 and SR-71 Physiological Support Program.
p0284 A73-32657

LUCE, R. S.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045

LUCHI, R. J.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686

LUCHKOV, V. V.
Effect of a subjective ambiguity estimate concerning the duration of work on activity regulation
p0394 A73-41892

LUCKEY, T. D.
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet.
p0355 A73-39103

LUCZAK, H.
Ergonomic assessment of information work
p0198 A73-25649
Heart rate variability and work-load measurement.
p0250 A73-30879
An analysis of heart rate variability.
p0250 A73-30882

LUDBROOK, P.
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities.
p0436 A73-45400

LUDLOW, J. E.
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
Human response to transportation noise and vibration.

p0310 A73-35328
LUBBERS, D. W.
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
p0056 A73-14647
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145
LUPKIN, D. H.
Implications of psychoanalytic factors for Air Force operations.
p0196 A73-25340
LUPT, U. C.
Plasma electrolytes, pH, and ECG during and after exhaustive exercise.
p0278 A73-31347
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463
Specialized physiological studies in support of manned space flight
[NASA-CR-128741] p0186 N73-19129
LUISADA, A. A.
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008
LUIZOV, A. V.
Dependence of visual acuity on background brightness
p0306 A73-34639
LUK, A. W.
An associative-network model of memory
p0061 A73-15797
LUKANIN, V. N.
Estimation of the biological danger of the very high energy component of space radiation.
p0398 A73-42180
LUKAS, J. S.
Effects of aircraft noise on human sleep.
p0096 A73-18546
Arousal from sleep by noises from aircraft with and without acoustically treated nacelles
[NASA-CR-2279] p0338 N73-27058
LUKASHIN, A. V.
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
LUKIN, A. A.
Results and prospects of microbiological studies in outer space.
p0203 A73-26487
Microbiological investigations in space flights
p0279 A73-31501
Microbiological investigations during spaceflight
p0262 N73-23025
LUKISHOV, G. I.
The influence of manipulator kinematics on the selection of the geometric parameters of boxes and chambers
p0336 N73-26087
LUNDGREN, C. E. G.
Effects of immersion with the head above water on tissue nitrogen elimination in man.
p0589 A73-12563
LUNDQVIST, G. R.
Human perception of humidity under four controlled conditions.
p0089 A73-17864
LUNEV, I. IA.
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability
p0124 A73-20988
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
LUNEV, I. Y.
Effect of a gas mixture with an increased oxygen and carbon dioxide content on man's orthostatic tolerance
p0135 N73-16055
Influence of stepped adaptation to high-mountain conditions on the respiratory function and acid-alkali equilibrium in the blood during different motor activity regimes of subjects
p0372 N73-29030
LURIA, S. M.
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
The visual evoked cortical response as a measure of stress in naval environments: Methodology and analysis. 2: Rapid flash rates
[AD-744934] p0595 N73-10088
Further tests of training techniques to improve visual-motor coordination of Navy divers underwater
[AD-744936] p0605 N73-10163
Visual evoked responses for divers breathing various gases at depths to 1200 feet
[AD-749325] p0108 N73-15127
Masking as an indicator of neural fatigue: A preliminary study
[AD-752975] p0300 N73-25129
Handedness and adaptation to distortions of size and distance under water
[AD-759722] p0337 N73-26098
LUSCHEI, E. S.
Unit activity in the brainstem related to eye movement - Possible inputs to the motor nuclei.
p0315 A73-36434
LUSHINA, L. A.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
LUSTER, T.
Vestibular adaptation in man - Effects of increased acceleration during different phases of adaptation.
p0058 A73-15218
LUTE, R. A.
Doppler echocardiography - The localization of cardiac murmurs.
p0432 A73-44947
LUTHERER, B.
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
LUTMAN, M.
Studies in hearing conservation.
p0309 A73-35326
LUX, H. L.
Application of frequency discrimination technique to the analysis of electroencephalographic signals.
p0057 A73-15052
Application of frequency discrimination technique to the analysis of electroencephalographic signals
[NASA-CR-129173] p0611 N73-11091
LVOVA, T. S.
Evaluating the influence of vibration on the radiation reaction in dogs with the aid of certain clinical-hematological indices
p0215 N73-20084
LYMAN, J. T.
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space
[LBL-1011] p0186 N73-19134
LYNCH, H. J.
Binding of Melatonin to human and rat plasma proteins.
p0170 A73-24657
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
LYNEN, F.
Investigation of the biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068
LYON, J.
An inexpensive technique for analysis of aortic-nerve activity.
p0403 A73-42681

LYONS, J.
Summary of visual detection data, part 2
[CDC-JL-5] p0231 N73-21147
LYONS, J. J.
Multi-task time-sharing requirements
[AD-755363] p0269 N73-23088

M

MABRY, J. E.
The effect of simulated sonic boom rise time and overpressure on electroencephalographic waveforms and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
MABSON, W. E.
Human exposure criteria to laser energy
p0266 N73-23067
MAC LEOD, P.
Aerodynamic and temporal parameters of olfactory stimulation - Discussion concerning the lowering of the threshold by prenasal injection in man
p0046 A73-13787
MACALPIN, E. M.
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992
Cardiovascular responses to sudden strenuous exercise - Heart rate, blood pressure, and ECG.
p0310 A73-35461
MACDONALD, R. B.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064
MACEK, T. J.
Biological indicators and the effectiveness of sterilization procedures.
p0288 A73-33692
MACELROY, R. D.
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
MACEWEN, J. D.
The acute inhalation toxicology of chlorine pentafluoride.
p0282 A73-32173
Continuous animal exposure to dichloromethane
[AD-746295] p0611 N73-11088
Chronic exposure studies with monomethylhydrazine
[AD-751440] p0139 N73-16087
Continuous exposure of animals to methylisobutylketone
[NASA-TM-X-69100] p0177 N73-18130
Toxic Hazards Research Unit annual technical report, 1972
[NASA-CR-1316751] p0259 N73-22043
MACEWEN, J. W.
Toxicology
p0105 N73-15101
MACGREGOR, R. J.
Intrinsic oscillations in neural networks: A linear model for parallel, single-unit pathways
[R-984-RC] p0070 N73-13083
MACK, A.
A new illusion - The underestimation of distance during pursuit eye movements.
p0086 A73-17575
MACK, H. M.
Properties of phosphoribulokinase from Thiobacillus neapolitanus.
p0044 A73-13597
MACK, P. B.
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
MACKAY, J. S.
An evaluation of some special techniques for nuclear waste disposal in space
[NASA-TM-X-62272] p0366 N73-27943
MACKENZIE, W. F.
Pathological lesions caused by methylisobutylketone
[AD-751444] p0139 N73-16083
MACKIE, R. R.
Active sonar target detection and reporting: Perceived consequences and their effects on performance
[AD-750761] p0114 N73-15174
MACKINNON, J. R.
Development of techniques for measuring performance in the undersea environment
[AD-748036] p0072 N73-13108
MACKLEM, P.
Gas diffusion across collateral channels.
p0048 A73-14113
MACKLEM, P. T.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Gas mixing during inspiration.
p0323 A73-36652
MACKRO, J.
Study of design and control of remote manipulators. Part 4: Experiments in video camera positioning with regard to remote manipulation
[NASA-CR-124190] p0221 N73-20139
MADHUSUDHAN RAO, V.
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
MADRAS, B. K.
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
MAFFEI, L.
Contrast in night vision.
p0046 A73-13759
The visual cortex as a spatial frequency analyser.
p0308 A73-34840
MAGAZANIK, A.
Tolerance to heat following cold stress.
p0325 A73-36784
MAGDALENO, R. E.
Serial segments method for measuring remnant.
p0578 A73-10324
Effects of display format on pilot describing function and remnant
p0599 N73-10123
Serial segment method for measuring remnant
p0601 N73-10136
MAGHERINI, P. C.
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439
MAGORA, A.
Conditional computer analysis of the onset-to-onset duration of spikes from the electromyographic interference pattern of extraocular muscles.
p0392 A73-41731
MAGRINI, F.
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015
MAGYAR, J.
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
MAHER, F.
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107
MAHER, J. T.
Myocardial function and ultrastructure in chronically hypoxic rats.
p0042 A73-13369
MAIBORODA, S. A.
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656

MAIDON, R.
Protective clothing for fueling personnel
p0115 A73-18949
MAINS, R. C.
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
MAINZER, S. E.
Antarctica as a Martian model.
p0396 A73-42162
MAIOROHIK, V. E.
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
MAKARCHENKO, A. F.
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
MAKARENKO, V. A.
Structure and functions of central mechanisms of reinforcement
p0449 N73-33067
MAKAROV, N. I.
Diet at Vostok station
p0379 N73-29358
Hygienic investigations at Vostok station
p0379 N73-29359
MAKAROVA, Z. O.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
MAKEEVA, V. F.
DNA catabolism in rat tissues in response to transverse accelerations
p0087 A73-17679
MAKEIEVA, V. F.
DNA catabolism in the organs of rats under the influence of transversely directed accelerations
p0063 N73-12080
MAKHMUDOV, E. S.
High temperature tolerance enhancement in rats by thermal training and medicinal preparations
p0207 A73-27705
Increase in the tolerance of rats to a high temperature under the influence of thermal conditioning and drugs
p0216 N73-20099
MAKOVKINA, T. V.
Dynamics of weight change and variations in weight indices of internal organs in white mice as a function of atmospheric composition and diet
p0443 N73-33022
MAKSIMENKO, L. A.
Mathematical analysis of the operation of regulatory mechanisms of the spinal cord
p0354 A73-39005
MAKSIMENKO, N. A.
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656
MAKSIMOV, D. G.
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
The use of sampling quantiles for the compression of telemetric transmission and the statistical handling of medical information.
p0207 A73-27646
Prolonged monitoring of human cardiac bioelectric activity during ground experiments and in space flight
p0065 N73-12095
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079
MAKSIMOV, I. V.
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
Development of effective means for desaturation of the human organism as a prophylactic measure against altitude decompression disturbances
p0305 A73-34231
Search for effective regimes for desaturation of the human body for preventing high-altitude decompression disorders
p0372 N73-29029
MAKSIMOVA, E. V.
Effect of the frequency of changing the nutrient solution on productivity of plants cultivated on keramzit
p0183 N73-19106
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method
p0184 N73-19110
MAKSIMOVA, G. N.
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
MAKSIMOVA, L. V.
Effect of sympatholytin on metabolism in resting and working muscles in relation to the degree of their adaptation to intensified activity
p0322 A73-36571
MAKSIMOVA, Y. V.
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion
p0184 N73-19111
MAKUL'KIN, E. P.
Physiological mechanisms of evoked-potential habituation in the visual analysor
p0119 A73-20006
MAL'TSEV, V. N.
Auto-antibodies of an irradiated organism
p0060 A73-15711
MALAN, A.
Ventilation measured by body plethysmography in hibernating mammals and in poikilotherms.
p0129 A73-21612
Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613
MALASANOS, L. J.
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
MALCOLM, R.
A quantitative study of vestibular adaptation in humans
[AMRU-R-70-1] p0607 N73-11062
Effect of changes in illumination level on electro-oculography (EOG)
[AMRU-R-71-1] p0607 N73-11064
MALEEV, V. IA.
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685
MALHOTRA, M. S.
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
MALIARENKO, IU. E.
Cardiovascular reflexes evoked by potassium ion stimulation of the heart under conditions of spinal deafferentation and intact innervation
p0047 A73-13820
MALIK, A. B.
Time course of pulmonary vascular response to hypoxia in dogs.
p0120 A73-20168
Independent effects of changes in H+ and CO2 concentrations on hypoxic pulmonary vasoconstriction.
p0169 A73-24565
MALINOVSKAYA, N. S.
Food consumption and morphological indices of blood in white mice with the replacement of air

nitrogen by inert gases in a pressurized chamber
p0442 N73-33020

MALINOWSKY, H.
Continuous radio telemetric recording of pulse rate in radar controllers while on duty
p0356 A73-39208

MALIUTINA, T. S.
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517

MALKIN, V. B.
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005

MALKINA, I. S.
The incremental part of the organic matter balance of the underwood depending on the light conditions
p0378 N73-29330

MALLON, J.
Implantable transducer for in vivo measurement of bone strain.
p0206 A73-27443

MALM, G. E.
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059

MALONE, T. B.
Man-machine interface for controllers and end effectors.
p0344 A73-37325
Evaluation of human operator visual performance capability for teleoperator missions.
p0344 A73-37327
Applications of space teleoperator technology to the problems of the handicapped
[NASA-CR-133357] p0367 N73-27949
The role of man in flight experiment payload missions. Volume 1: Results
[NASA-CR-135487] p0421 N73-31020
The role of man in flight experiment payload missions. Volume 2: Appendices
[NASA-CR-135488] p0421 N73-31021

MALONEY, D. M.
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625

MALVACHE, N.
New method of stimulation for the study of photoreceptors.
p0237 A73-28362

MALYUTINA, T. S.
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays
p0263 N73-23041

MAMALADZE, G. T.
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal
p0245 A73-30387

MAMASAKHLISOV, G. V.
Organization of spontaneous muscular activity in man
p0157 A73-22863

MAMATALIEV, U.
Cytochemical-luminescence study of adrenal cortex proteins under the influence of ionizing radiation
p0587 A73-12354

MAMEDBEKOVA, L. G.
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400

MAMEDOV, A. M.
Cross-Correlation analysis of stress rhythm during action of stimuli of different biological significance
p0450 N73-33071

MAMEDOV, SH. V.
Inhibition by selenium of the free-radical states of the retina of the eye
p0430 A73-44724

MAMONTOVA, T. W.
Coacervate systems and evolution of matter on the earth.
p0091 A73-17951

MAM'KOVS'KA, I. M.
Age-dependent characteristics of myoglobin content and distribution in the heart and skeletal muscles
p0429 A73-44669

MANCHESTER, J. H.
Clinical manifestations of acute myocardial infarction.
p0321 A73-36543

MANESHIN, V. S.
Integration of reflection and relation in a reflex act
p0061 A73-15798

MANGOLD, D. W.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045

MANGOS, J.
Transductal fluxes of Na, K, and water in the human eccrine sweat gland.
p0281 A73-31923

MANINA, A. A.
Plasticity of the spinous-process apparatus in the functional stimulation of the cerebrum
p0085 A73-17177
Subcellular changes in the motor region of the cortex during sleep
p0257 N73-22028

MANN, G. V.
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540

MANN, J. T.
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339

MANNING, J. M.
A mathematical model to assess changes in the baroreceptor reflex.
p0126 A73-21475

MANNING, M. P.
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972

MANO, T.
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211

MANOCHA, S. L.
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions.
p0284 A73-32600

MANSON, G.
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277

MANSUROV, T.
The role of carotid sinuses in the regulation of hemodynamics during motor activity
p0276 A73-31161

MANTEIFEL', IU. B.
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926

MANTHEY, F. A.
Medical considerations for aircraft passengers.
p0047 A73-13802

MANYI, K. M.
Elevated ST segments with exercise in ventricular aneurysm.
p0059 A73-15643

MARCHENKO, S. F.
Image analysis by neuron-like structures
p0060 A73-15789

MARCUS, M. L.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797

MARCUS, N.
Factors affecting processing mode in visual search.
p0311 A73-35493

MARCUS, P.
A new portable temperature-sensing device.
p0169 A73-24567
Some effects of cooling and heating areas of the head and neck on body temperature measurement at the ear.
p0238 A73-28504
MARECHAL, R.
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
MARENNYY, A. M.
Influence of the discontinuity between two media on the distribution of absorbed energy in a charged particle track
p0372 N73-29028
MAREYEVA, N. S.
Peculiarities of determining the oxidizability of water during its regeneration
p0183 N73-19104
MARGARIA, R.
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
Biomechanics of locomotion in subgravity.
p0397 A73-42175
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119
MARGULES , A. S.
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
MARGULES, D. L.
Hypothalamic norepinephrine - Circadian rhythms and the control of feeding behavior.
p0587 A73-12417
MARKARIAN, S. S.
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121
MARKARIAN, M. V.
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113
MARKARIAN, S. S.
Vestibular reactions during exposure to coriolis accelerations under hypoxic conditions
p0065 N73-12092
Problem of the interaction of analyzers and degree of vestibular reactions to the action of external stimuli
p0181 N73-19087
Effect of vestibular analyzer irritation under hypoxic conditions on some visual analyzer functions
p0263 N73-23040
MARKELOV, B. A.
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101
Evaluation of the functional state of granulocytopoiesis using a pyrogenal test
p0255 N73-22009
MARKELOV, V. V.
Dosimetry of space radiations
p0173 N73-18100
MARKEVICH, V. A.
Electroretinogram recovery cycle during light adaptation and after dark adaptation
p0168 A73-24518
MARKOSIAN, A. A.
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
MARKS, L. E.
Photopic luminosity measured by the method of critical frequency.
[AD-754344] p0585 A73-12076
Brightness and equivalent intensity of intrinsic light.
p0120 A73-20257
MARLOW, A. M.
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027
MARLOW, P. B.
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination.
p0194 A73-25136
MARLOWE, E.
Support of advanced development objective 43-13, human factors technology
[AD-744984] p0613 N73-11104
MARMOLIN, H.
Visually perceived motion in depth resulting from proximal changes. I, II.
p0388 A73-41186
MAROTTA, S. F.
Inhibition of the adrenocortical response to hypoxia by dexamethasone.
p0116 A73-19476
MARRAZZO, R. M.
Environmental health program in NASA
p0143 N73-17056
MARROCCO, R. T.
Single cell analysis of saturation discrimination in the macaque.
p0129 A73-21568
MARSH, H. E., JR.
Lipid-absorbing polymers
p0191 N73-19976
MARSHALL, M.
Megarad plastic film dosimeter.
p0427 A73-44212
MARSHALL, M. F. P.
The problem of early presbyopia in aircrew.
p0329 A73-36923
MARSONER, H. J.
Digital temperature-measuring device for medical applications
p0236 A73-28338
MARSTON, D. M.
Evaluation of laser eye protectors commercially available
[AD-746293] p0612 N73-11100
MART'IANOV, V. A.
Utilization extent of the muscle apparatus capabilities during maximum voluntary force exertion
p0080 A73-16696
MARTENS, V. K.
Hyperventilation in pilots during flight
p0343 A73-37197
MARTIN, A.
An introduction to radiation protection.
p0205 A73-27048
MARTIN, A. M.
Studies in hearing conservation.
p0309 A73-35326
Impulse noise damage risk criteria.
p0310 A73-35327
MARTIN, C. M.
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
MARTIN, G.
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
MARTIN, J. F.
Theoretical man machine interaction which might lead to loss of aircraft control
p0110 N73-15142
MARTIN, R. B.
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334

MARTIN, R. W.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846

MARTINEZ, C.
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928

MARUYAMA, K.
A study of visual shape perception
p0446 N73-33050

MARUYAMA, T.
A note on the hypothesis - Protein polymorphism as a phase of molecular evolution.
p0062 A73-16033

MASERJIAN, J.
Thin-film temperature sensor.
p0395 A73-42055

MASHINSKII, A. L.
Effects of space flight factors on Drosophila.
p0397 A73-42173

MASHINSKII, A. L.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072

MASLEN, G. V.
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645

MASON, J. K.
Annex 13 and the work of the aviation pathologist - Practical problems.
p0347 A73-37739

MASON, J. W.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Thyroid responses to simulated altitude.
p0157 A73-22926

MASON, R. E.
Exercise electrocardiography and vasoregulatory abnormalities.
p0043 A73-13541

MASSARD, P.
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
Determination of lesion threshold in the guinea pig auditory area due to sonic boom
[ISL-33/72] p0369 N73-27966

MASSARO, D.
Protein synthesis in lung - Recovery from exposure to hyperoxia.
p0323 A73-36653

MASSION, J.
Intervention of cerebello-cortical and cortico-cerebellar paths in the organization and regulation of movement
p0282 A73-32288

MASSOP, R. W.
Probability summation model for heterochromatic luminance additivity failure at absolute visual threshold.
p0235 A73-28099

MASSUE, J. P.
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946

MASSUMI, R. A.
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
Intra-atrial and esophageal electrography in the diagnosis of complex arrhythmias.
p0319 A73-36525

MASTENBROOK, S. M., JR.
Noninvasive measurement of central venous pressure
[NASA-CR-130348] p0133 N73-16039

MASTER, A. M.
Exercise testing for evaluation of cardiac performance.
p0043 A73-13538

MASTERS, R. L.
An operating environmental health program
p0147 N73-17093

MATEEFF, ST.
A combined photoelectric method for detecting eye movements.
p0585 A73-12079

MATEEV, S.
Saccadic suppression in the presence of structured background.
p0121 A73-20267

MATEEV, S. M.
Mislocation of visual stimuli during voluntary saccades.
p0084 A73-17174

MATHENY, J. L.
An inexpensive technique for analysis of aortic-nerve activity.
p0403 A73-42681

MATHENY, W. G.
Need for within-trial feedback as a function of task similarity in adaptive training of manual control.
p0081 A73-16709

MATHEWS, J. J.
Proposed new test for aptitude screening of air traffic controller applicants.
p0155 A73-22535
A comparative study of female and male air traffic controller trainees
[FAA-AM-72-22] p0611 N73-11094
Attrition-retention rates of air traffic control trainees recruited during 1960 - 1963 and 1968 - 1970
[FAA-AM-72-33] p0222 N73-20140

MATHEWS, M. D.
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133

MATHIVAT, A.
Responsibility for ischemic cardiopathies in civil aviation flight personnel
p0327 A73-36902

MATIN, E.
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463

MATIN, L.
Visual perception of direction and voluntary saccadic eye movements.
p0318 A73-36463

MATIUSHKIN, D. P.
Electrical activity of the external ear muscles in man /at rest and during identification of acoustic signals/
p0249 A73-30843

MATLACK, G. M.
Characterization and properties of medical grade Pu-238 fuels
[LA-DC-72-473] p0067 N73-12115

MATLINA, E. SH.
Catecholamine exchange in the hormonal and mediator links of the sympathicoadrenal system under stress
p0121 A73-20367

MATSININ, V. V.
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737

MATSNEV, E. I.
Functional state of the auditory analysor under conditions of prolonged clinostatic hypokinesia
p0425 A73-43789
Analysis of some indices of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026

MATSUDA, Y.
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772

MATSUI, H.
Measurement of the reaction time of muscular relaxation.
p0045 A73-13699

MATSUMOTO, G.
Technical improvements in radiotelemetering of the electrocardiogram.
p0053 A73-14293

MATSUO, J. T.
Biomedical responses of parachutists to 110 through 175 knot /IAS/ through-the-air tow by aircraft.
p0285 A73-32675
MATSYNIN, V. V.
Hydrogen ion concentration in the blood of man under high mountain conditions with physical loads
p0584 A73-11924
MATTHEWS, F. L.
Finite element displacement analysis of a lung.
p0056 A73-14661
MATTHEWS, P. B. C.
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
MATTINGLY, G. S.
Study of astronaut restraints and mobility aids in a weightless shirtsleeve environment
[NASA-CR-128590] p0603 N73-10150
MATUSOV, A. L.
Medical services
p0379 N73-29347
MATVEEV, IU. K.
Space-time dynamics of the impulse activity in human-brain neuron populations
p0080 A73-16692
MATVEIEV, Y. K.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029
MAUCH, S. P.
The direct endangering of the living space (a proposed set of quantitative concepts)
[NRC-TT-1636] p0376 N73-29057
MAUDABBOCUS, A. Y.
The influence of wavelength on visual adaptation to spatially periodic stimuli.
p0200 A73-26199
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418
MAULDIN, D. G.
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
MAURER, W.
Calorimetric investigation of enzymes. Thermodynamic parameter determination of the interaction between ribonuclease T1 inhibitors and substrates
[FBWG-FBWT-72-12] p0137 N73-16073
Nuclear resonance investigation of enzymes. PMR spectra of ribonuclease inhibitor complexes
[BMWG-FBWT-72-13] p0137 N73-16074
MAURO, F.
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697
MAVROGEORGIS, E.
The value of the ultrasonic Doppler method and apexcardiography as reference tracings in phonocardiography.
p0583 A73-11509
MAY, E.
Interrelationship between gravity and mechanical impedance of supine humans
p0368 N73-27963
MAY, J. G.
The effects of electrical stimulation of the eye upon increment threshold for square-wave gratings.
p0121 A73-20260
MAYER, F. E.
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
MAYER, H. B.
Monocular pilots - A followup study.
p0387 A73-41163
MAYHAN, K. G.
Chronic oxygen electrodes: A feasibility study
[AD-748422] p0074 N73-13120
MAYHEW, J. E. W.
After-effects of movement contingent on direction of gaze.
p0204 A73-26721
MAZNEVA, G. E.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
MAZNEVA, G. Y.
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
MCARTHUR, W. J.
Handling the hijacker.
[AD-757130] p0589 A73-12564
MCCALLY, M.
Combined environmental stresses
p0106 N73-15110
MCCANN, F. V.
Comparative aspects of electrogenesis in myocardial cells.
p0198 A73-25599
MCCAUGHAN, D.
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
MCCAUGHEY, O. J.
Investigation of biowaste resistojets for space station application
[NASA-CR-112159] p0112 N73-15161
MCCLOSKEY, D. I.
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
MCCLURE, G.
Modulated light transmission for electrical isolation in a multichannel physiological monitoring system.
p0117 A73-19482
MCCLURE, H.
The pathology of inactivation in monkeys.
p0314 A73-35983
MCCLURE, J. A.
Sweat sensor for qualitative measurements.
p0050 A73-14160
MCCOLLISTER, S. B.
Toxicological evaluation of a beryllium motor exhaust product
[AD-756531] p0259 N73-22042
MCCONAHAY, D. R.
Maximal treadmill exercise electrocardiography - Correlations with coronary arteriography and cardiac hemodynamics.
p0590 A73-12821
MCCONNELL, W. E.
The NAVR file.
p0155 A73-22539
MCCONVILLE, J. T.
Anthropometry of US Army aviators, 1970
[AD-743528] p0605 N73-10162
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
MCCOY , D. F.
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
MCCRAW, D. B.
Assessment of left ventricular dimensions and function by echocardiography.
p0289 A73-34038
MCCREIGHT, L. R.
Convectionless electrophoretic separation of biological preparations
[NASA-CR-123920] p0606 N73-11055
MCCULLOUGH, E. E.
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
MCCULLUM, E. E.
Bone strength and in-flight mechancial stresses
[AD-754982] p0221 N73-20134
MCCUTCHEON, E. P.
A standard psychophysiological preparation for the study of environmental stress.
p0286 A73-33130
MCDONOUGH, M. T.
Problems in the recognition of angina pectoris.
p0321 A73-36541
MCFADDEN, D.
Monoptic and dichoptic metacontrast across the

vertical meridian.
p0046 A73-13764

MCFADDEN, E. B.
High density loading of multiple occupant flotation devices.
p0284 A73-32658

MCFARLAND, R. A.
Man in rarefied atmospheres.
p0251 A73-30937

MCFEELY, T. E.
Pupil diameter and the cross-adaptive critical tracking task: A method of workload measurement
[AD-749075] p0100 N73-14081

MCGANNON, W. J.
Ophthalmic method and apparatus
[NASA-CASE-LEW-11669-1] p0339 N73-27062
Ophthalmic liquefaction pump
[NASA-CASE-LEW-12051-1] p0437 N73-32000

MCGOUGH, G. A.
An ultrasonic displacement instrument with greater beam dispersal.
p0408 A73-43109

MCGRATH, J. J.
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564

MCHALE, P. A.
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638

MCHENRY, P. L.
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543

MCILROY, M.
Assessment of left heart function by noninvasive exercise test in normal subjects.
p0277 A73-31345

MCINTYRE, T. W.
Regression of altitude-produced cardiac hypertrophy.
p0433 A73-45065

MCKAY, C. L.
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
The visual evoked cortical response as a measure of stress in naval environments: Methodology and analysis. 2: Rapid flash rates
[AD-744934] p0595 N73-10088
Further tests of training techniques to improve visual-motor coordination of Navy divers underwater
[AD-744936] p0605 N73-10163
Visual evoked responses for divers breathing various gases at depths to 1200 feet
[AD-749325] p0108 N73-15127
Handedness and adaptation to distortions of size and distance under water
[AD-759722] p0337 N73-26098

MCKAY, J. R.
A study of the effects of whole-body plus or minus a(z) vibration on postural sway
[AD-745580] p0596 N73-10098

MCKEE, D. L.
A study of underwater diver tactile sensitivity
[AD-743709] p0594 N73-10082

MCKENZIE, H. H.
Surface contaminants.
p0096 A73-18547

MCKEEHEN, C. E.
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666

MCLAREN, A. D.
Enzyme activity in terrestrial soil in relation to exploration of the Martian surface
[NASA-CR-128399] p0591 N73-10059

MCLAUGHLIN, P. J.
Informational biopolymer structure in early living forms.
p0090 A73-17946

MCLAURIN, L. P.
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259

MCLEOD, F. D., JR.
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108

MCLEOD, P.
Response strategies with a cross-coupled control system.
p0117 A73-19548

MCLEOD, P. D.
Interference of 'attend to and learn' tasks with tracking.
p0353 A73-38377

MCMIKEN, D. F.
Oxygen deficit-oxygen repayment relationships of men in treadmill running
p0441 N73-33013

MCMURTRY, I. F.
Cardiopulmonary responses of male and female swine to simulated high altitude.
p0432 A73-45058

MCNALL, P. E.
Effects of heat stress on performance.
p0096 A73-18473

MCNAMARA, H. C.
Memory and hibernation in Citellus lateralis.
p0078 A73-16324

MCNEW, J.
Physiology of chimpanzees in orbit. Part 1: Scientific Report
[NASA-CR-131374] p0220 N73-20129

MCPARTLAND, R. J.
Rapid eye movement analyzer.
p0156 A73-22697

MCQUEEN, J. L.
Microbiological testing of Skylab foods.
p0205 A73-27075

MCRAE, G. L.
Effects of hydrazine on electrophysiology, behavior and runway performance in the cat
[AD-746014] p0609 N73-11081

MCROBERT, H.
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678

MCRONALD, A. D.
Spacecraft microbial burden reduction due to atmospheric entry heating - Jupiter.
p0314 A73-36100

MCRONALD, A. S.
Spacecraft microbial burden reduction due to atmospheric entry heating: Jupiter
[NASA-CR-132072] p0292 N73-24117

MCRUER, D.
Development of pilot-in-the-loop analysis.
[AIAA PAPER 72-898] p0408 A73-43110

MCTEE, A. C.
Human engineering for the Air Force control display program
[AD-754916] p0223 N73-20148

MEAD, J.
Tests of a model of pulmonary elasticity.
p0048 A73-14114
Mechanical interaction between the diaphragm and rib cage.
p0359 A73-39778

MEARES, C. F.
The study of biological macromolecules using perturbed angular correlations of gamma radiation.
p0589 A73-12648

MEDJEDEV, V. M.
Ergonomics principles and recommendations, no. 2
[NASA-TT-F-14888] p0232 N73-21150

MEDRANO, G. A.
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200

MEDVEDEFF, M.
Work in aircraft fuel tanks
p0329 A73-36932

MEDVEDEV, V. I.
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654
Functional states of the operator
p0414 N73-30084

MEDVEDEV, Y. A.
The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness

p0215 N73-20087

MEDVEDOVSKAYA, T. P.
The functional state of the visual and vestibular analyzers of those who work with small doses of ionizing emissions
[AD-750499] p0109 N73-15132

MEDVEZHOVA, E. A.
On the problem of barotrauma of the middle ear
p0254 N73-22000

MEEHAN, J. P.
Observation of arterial blood pressure of the primate
[NASA-CR-131890] p0252 N73-21980

MEERSON, F. Z.
Possible mechanisms of cardiac hypertrophy.
p0588 A73-12511
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis.
p0115 A73-19151
The contractile function of the myocardium in two types of cardiac adaptation to a chronic load.
p0118 A73-19931
Effect of prior adaptation to cold on the development of experimental hypertonia
p0381 A73-40209
Influence of preliminary adaptation to the main environmental factors on the ATP level and phosphorylation potential in the myocardium during severe heart strain
p0389 A73-41278
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549

MEFFERD, R. B., JR.
Influence of a visual frame and vertical-horizontal illusion of shape and size perception.
p0058 A73-15219

MEFFERT, B.
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873

MEFFERT, H.
UV-induced lipid peroxidation in human epidermis, dermis, and hypodermis in vitro
p0153 A73-21873

MEGAN, E. D.
Directional errors and their correction in a discrete tracking task.
p0095 A73-18470
Individual and simultaneous tracking of a step input by the horizontal saccadic eye movement and manual control systems.
p0392 A73-41735

MEHLER, W. R.
Comparative anatomy of the vestibular nuclear complex in submammalian vertebrates.
p0096 A73-18575

MEHMEL, H. C.
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
Hemoglobin-oxygen equilibrium and coronary blood flow - An analog model.
p0433 A73-45060
Response of coronary blood flow to pH-induced changes in hemoglobin-02 affinity.
p0433 A73-45061

MEHR, E.
Manual digital positioning in 2 axes - A comparison of joystick and track ball controls.
p0081 A73-16706

MEHR, E. B.
Manual digital positioning in 2 axes - A comparison of joystick and track ball controls.
p0081 A73-16706

MEILINK, L. J.
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946

MEIRICK, R.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133

MEKEL, R.
Digital modeling of human operator dynamics via class of Liapunov functions
p0598 N73-10111
Nonlinear and digital man-machine control systems modeling
[NASA-CR-132294] p0377 N73-29060

MEL'NIKOV, V. P.
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964

MELESHKO, G. I.
Study of the effect of increased oxygen concentration on the metabolism of Chlorella
p0279 A73-31508
Studies of the stability of the chemical composition of a chlorella biomass during its prolonged cultivation with recovery of the medium on nitrates
p0184 N73-19108
Investigation of the effect of increased oxygen concentrations on chlorella metabolism
p0262 N73-23032

MELLOR, D. P.
Carbonaceous meteorites - Possible sites of extraterrestrial life.
p0243 A73-30130

MEN', P. G.
Techniques for studying the aerodynamic characteristics of the bronchial tree of man
p0322 A73-36576

MENAKER, M.
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422

MENDEZ, C.
Atrioventricular transmission.
p0198 A73-25598

MENGEL, C. E.
Effect of sleep-wake reversal and sleep deprivation on the circadian rhythm of oxygen toxicity seizure susceptibility.
p0589 A73-12561
CNS epinephrine tone, a possible etiology for the threshold in susceptibility to oxygen toxicity seizures.
p0049 A73-14156

MENGUY, C.
Effect of sonic boom on hearing and vestibular equilibrium
p0327 A73-36910
The value of data processing in the analysis of visual evoked potentials
p0327 A73-36911

MENIER, R.
Recording of second time derivative of displaced volume V in breathing.
p0159 A73-22937

MENKES, H.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651

MENSCH-DECHENE, J.
Exchange of hand heat. The role of circulatory reactions and variations of the local temperature of arterial bloods
[NASA-TT-F-15143] p0445 N73-33043

MENSCH, A. J.
Visual evoked responses elicited by rapid stimulation.
p0094 A73-18350
The visual evoked cortical response as a measure of stress in naval environments: Methodology and analysis. 2: Rapid flash rates
[AD-744934] p0595 N73-10088

MENSEN DE SILVA, E.
Lactate, alpha-GP, and Krebs cycle in sea-level and high-altitude native guinea pigs.
p0200 A73-26122

MENSHOV, A. I.
Space ergonomics

[NASA-TT-F-750] p0366 N73-27946

MERCHANT, J.
The oculometer in remote viewing systems.
p0344 A73-37320

MEREK, E. L.
Imaging and life detection.
p0312 A73-35804
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485

MERKEL, H.-J.
Problems of flight-pedagogical conferences
p0041 A73-13073

MERRILL, J. P.
What mediates the renal vascular response to a salt load in normal man.
p0577 A73-10170

MERTENS-STRYTHAGEN, J.
Intensity of exercise and heart tissue catecholamine content.
p0042 A73-13498

MERTENS, J.
Changes of the circadian rhythm of the body temperature after transmeridian flights
[DLR-FB-73-01] p0178 N73-18140

MESHCHERSKII, E. L.
Devices for dynamic recording of volumetric blood flow rates lower than 1 ml per minute
p0126 A73-21325
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570

MESHCHERYAKOVA, O. M.
Influence of the discontinuity between two media on the distribution of absorbed energy in a charged particle track
p0372 N73-29028

MESSENGER, R.
A psychophysical study of the HF sound phenomenon
[AD-747684] p0099 N73-14076

MESSER, J. V.
Heart muscle viability following hypoxia - Protective effect of acidosis.
p0303 A73-34097

MESSIER, A. A.
The Bohr effect in chronic hypercapnia
[AD-763394] p0418 N73-31005

MESSIN, R.
Normal pulmonary pressure-flow relationship during exercise in the sitting position.
p0042 A73-13124

METGES, P. J.
Surveillance of the vertebral column in pilots who have undergone an ejection
p0328 A73-36914

METZ, B.
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880

METZ, K. F.
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418

METZLER, T. R.
Pilot performance as a function of three types of altitude displays
[ASD-TR-72-63] p0074 N73-13117

METZLER, U.
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732

MEUR, G.
Influence of the dazzling of an eye on the state of adaptation of the congeneric eye in a normal subject
p0245 A73-30388

MEYER-DELIUS, J.
Physiological studies of fatigue in activities requiring mental concentration in hot climate, the influence of positioning and sensorial irritation
p0189 N73-19155

MEYER-OSTERKAMP, S.
The operational control of the alpha component in the electroencephalogram by means of auditory feedback
p0204 A73-26549

MEYER-SCHWERTZ, H. T.
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880

MEYER, D. H.
Effects of cardiac output on /O-18/2 lung diffusion in normal resting man.
p0094 A73-18335

MEYER, J.
Oxygen safety in corporate aircraft.
p0357 A73-39215

MEYER, J. S.
Operating room environment control. Part A: A valve cannister system for anesthetic gas adsorption. Part B: A state-of-the-art survey of laminar flow operating rooms. Part C: Three laminar flow experiments
p0231 N73-21141

MEYERSON, F. Z.
Molecular mechanisms of adaptation to hypoxia
[NASA-TT-F-15058] p0411 N73-30060

MEYERSTEIN, N.
A comparison of three methods of acclimatization to dry heat.
p0158 A73-22932
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742

MIASNIKOV, A. P.
Vitamin metabolism alteration under increased atmospheric pressure
p0193 A73-25036

MICHAEL, J. A.
Dependence of visual tracking capability upon stimulus predictability
p0111 N73-15149

MICHAELSON, S. M.
Thyroid pathophysiology of microwave radiation
[VR-3490-149] p0107 N73-15122
Relevancy of experimental studies of microwave induced cataracts to man
[UR-3490-103] p0107 N73-15123

MICHAILOFF, T. M.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172

MICHEL, E. L.
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326

MICHELI, G. S.
An evaluation of the training effectiveness of device 2F90, TA-4J operational flight trainer. Part 1: The B stage
[AD-750248] p0113 N73-15170

MICHIE, P. T.
Human phasic reflex response to parameters of a mechanical stimulus as an index of muscle-spindle sensitivity.
p0403 A73-42679

MIELKE, J. E.
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868

MIETTINEN, T. A.
Mechanisms of hyperlipidaemias in different clinical conditions.
p0405 A73-42832

MIHLFEITH, C. M.
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429

MIKEL'SAAR, M. E.
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space
p0306 A73-34239

MIKELADZE, A. L.
Synapse localization study by electron microscopy of primary afferent tissues in cochlear nuclei of the brain stem

p0118 A73-19650

MIKELSAAR, M. E.
Study of the species composition of enteric bacilli during prolonged confinement of man in a closed space
p0373 N73-29037

MIKHAILOV, V. M.
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity
p0588 A73-12467
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work.
p0284 A73-32617

MIKHAILOV, V. V.
Energy cost of muscle work in a state of fatigue
p0080 A73-16697

MIKHAILOVA-LUKASHEVA, V. D.
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964

MIKHAILOVSKII, G. P.
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236

MIKHAYLENKO, A. A.
Determining optimal periods of bed rest by certain physiological indices
[NASA-TT-F-15144] p0438 N73-32004

MIKHAYLOV, B. M.
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

MIKHAYLOV, V. I.
Certain peculiarities of the biological action of gaseous toxic substances which are discharged into the atmosphere from the urine and feces
p0182 N73-19097
Effect of a chemical preservative on the intensity of the discharge of certain gaseous toxic substances from stored urine
p0183 N73-19098
Problem to toxicity of exhaled air
p0183 N73-19103

MIKHAYLOV, V. M.
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia
p0134 N73-16052

MIKHAYLOVSKIY, G. P.
Some characteristics of hemodynamics in an orthostatic test for persons with different vestibular-autonomic tolerance
p0373 N73-29034

MIKHNIUK, T. F.
Features of the influence of hypergravitation on the motor activity of the chicken embryo amnion developing under normal conditions and under conditions of constant rotation
p0242 A73-30022

MIKIVER, M.
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059

MIKOLAJCZYK, M.
Current research results and future efforts in the problem of the biological effect of microwave radiation in the Department of Physical Injury at the Institute of Industrial Medicine
p0415 N73-30904

MIKOLS, M. J.
The effects of passive or active warm-up upon certain physiological measures.
p0042 A73-13123

MILES, J. S.
A study of the thermoregulatory characteristics of a liquid-cooled garment with automatic temperature control based on sweat rate: Experimental investigation and biothermal man-model development
[NASA-TM-D-7311] p0299 N73-25126

MILES, W. L.
Aircraft fault isolation based on pattern of cockpit indications - A human factors approach.
p0584 A73-11857

MILHAUD, C.
Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284

MILHORN, H. T., JR.
Digital computer studies of respiratory control.
p0123 A73-20577
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2.
p0359 A73-39777

MILIC-EMILI, J.
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129

MILLA, E.
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623

MILLER, A. T., JR.
Interrelation of systemic and cellular responses to acute and chronic hypoxia
[AD-743536] p0594 N73-10081

MILLER, C. W.
Transcutaneous measurement of blood velocity profiles and flow.
p0408 A73-43108

MILLER, E. F., II
Semicircular canals as a primary etiological factor in motion sickness.
p0588 A73-12560
Experiment M-131 - Human vestibular function.
p0307 A73-34741
Altered susceptibility to motion sickness as a function of subgravity level.
p0358 A73-39486
Specific acute losses of vestibular function in man following unilateral section of one or all components of the eighth cranal nerve
[NASA-CR-129672] p0070 N73-13084

MILLER, H. B.
Effects of resource constraints on ideal plans.
p0044 A73-13559

MILLER, J. E.
A salt-inhibited cytochrome c reductase obtained from the moderately halophilic bacterium, Micrococcus halodenitrificans.
p0045 A73-13598

MILLER, L. A.
Studies of visual inspection.
p0423 A73-43212

MILLER, L. B.
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118

MILLER, M.
Urinary excretion of antidiuretic hormone in man
p0174 N73-18107

MILLER, U.
Target acquisition for picture transmission using a TV system
[MBB-UFE-892-72-O] p0113 N73-15165

MILLER, W. S.
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691

MILLHOLLON, A.
Summary of air-to-air visual detection data, part 1
p0231 N73-21146

MILLODOT , M.
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562

MILLS, A. W.
Auditory localization.
p0244 A73-30282

MILLS, E. S.
Test results of six-month test of two water electrolysis systems
[NASA-CR-128629] p0612 N73-11095

MILLS, R. C.
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497

MILLS, R. G.
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775
Predictive validity of central-composite design regression equations.
p0431 A73-44776
MILLS, S. M.
Automatic surface inoculation of agar trays.
p0155 A73-22550
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] p0136 N73-16061
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] p0141 N73-16096
MILNER, B. A.
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
MILONE, F. F.
Automatic analysis and classification of electroencephalograms
p0309 A73-34966
MILOSERDIN, Y. V.
The influence of manipulator kinematics on the selection of the geometric parameters of boxes and chambers
p0336 N73-26087
MILROY, W. C.
Thyroid pathophysiology of microwave radiation
[VR-3490-149] p0107 N73-15122
MILSUM, J. H.
Characteristics of neural transmission from the semicircular canal to the vestibular nuclei of cats
[AMRU-R-70-2] p0606 N73-11059
Dynamic asymmetry in neural components of the vestibular system
[AMRU-R-69-2] p0607 N73-11060
Neural response of the vestibular system to translational acceleration
[AMRU-R-69-3] p0608 N73-11068
Spatial and dynamic aspects of visual fixation
p0110 N73-15141
MILTON, S.
Is anyone out there.
p0387 A73-41175
MIMPEN, A. M.
Musical interval recognition with simultaneous tones
[IZF-1972-20] p0268 N73-23078
MINS, J. L., III
History, rationale, and verification of color vision standards and testing in the United States Air Force
p0179 N73-19069
MINAIRE, Y.
Energy supply in acute cold-exposed dogs.
p0324 A73-36655
Plasmatic lactate origins and ends
p0434 A73-45157
MINAMITATE, K.
Measurement of the reaction time of muscular relaxation.
p0045 A73-13699
MIRABELLA, A.
Development of a standardized battery of performance tests for the assessment of noise stress effects
[NASA-CR-2149] p0148 N73-17102
MIRAKIAN, A. I.
Effect of reduction of an unfixed object
p0394 A73-41890
MIRANDA, R. E.
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
MIRENKOV, P. V.
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
MIROSHNIKOV, IU. S.
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
MIROSHNIKOV, Y. S.
Use of multichannel rheography in physiological investigations on a centrifuge
p0065 N73-12094
MIRRAKHIMOV, M. M.
Physiological examination of man at the altitudes of Tian Shan and Pamir /a review/
p0584 A73-11922
Some results of studies of the high-mountain physiology of man in Tian Shan and Pamir and prospects of further studies
p0168 A73-24514
Time of retention of increased resistance to hypoxia in relation to different patterns of high mountain acclimatization
p0255 N73-22006
MIRZOIAN, R. S.
Changes in cerebral circulation under the influence of vasodilating agents
p0239 A73-29074
MISHCHENKO, V. I.
Effect of heparin on blood platelet aggregation and thrombosis under the action of direct electric current
p0126 A73-21321
MISHCHENKO, V. S.
Specific features in the activity of the oxygen transport system of the organism during hand-performed working cycles of submaximum intensity
p0323 A73-36579
MISHKIN, S.
The Interdependence of clinical neurology and neurophysiology: An historical review of the vestibulo-ocular reflex
p0110 N73-15145
Predominant direction of gaze during slow head rotation
p0111 N73-15148
MISHUROV, E. A.
Determination of the value of blood oxygen capacity and of the oxyhemoglobin dissociation curves by polarographic coulombometry
p0045 A73-13750
MISSELHORN, J. E.
Development of a laboratory prototype water quality monitoring system suitable for use in zero gravity
[NASA-CR-112267] p0222 N73-20104
MITARAI, G.
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
MITCHELL, D. E.
Meridional amblyopia - Evidence for modification of the human visual system by early visual experience.
p0128 A73-21562
MITCHELL, J. C.
Cytologic aspect of RF radiation in the monkey, part 1
[AD-749583] p0108 N73-15128
MITCHELL, J. H.
Absence of appreciable cardiovascular and respiratory responses to muscle vibration.
p0049 A73-14119
MITCHELL, J. M.
Differential thermal sensitivity in the human skin.
p0251 A73-30912
MITCHELL, O. G.
Human hibernation and space travel.
p0050 A73-14170
MITKIN, A. A.
Research principles and the construction of mnemonic diagrams
p0414 N73-30083
Ergonomics research methods
p0414 N73-30086
MITRANI, L.
A combined photoelectric method for detecting eye movements.
p0585 A73-12079
Saccadic suppression in the presence of structured background.
p0121 A73-20267

MITROFF, I. I.
On the fundamental importance of the social psychology of research as a basic paradigm for the philosophy of science: A philosophical case study of the psychology of the Apollo moon scientists
[NASA-CR-130832] p0176 N73-18122
MITROHOVA, I. A.
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
MITTELSTAEDT, L.
A device for the continuous measurement of subjective changes
p0285 A73-33090
MITTERER, R. M.
Biogeochemistry of aragonite mud and oolites.
p0056 A73-14662
MITTL, R. N.
Ophthalmodynamography in pilots to test internal carotid insufficiency - Comparison of blood-pressure responses.
p0387 A73-41162
MITZ, M. A.
Life detection systems.
p0056 A73-14320
MIURA, M.
Measurement of the reaction time of muscular relaxation.
p0045 A73-13699
MIYAMOTO, Y.
A new method for simultaneous measurement of total respiratory resistance and compliance.
p0084 A73-16799
MIYASHITA, M.
Measurement of the reaction time of muscular relaxation.
p0045 A73-13699
MIZELL, S.
Mitotic activity in dorsal epidermis of Rana pipiens.
p0122 A73-20456
Incidence of Lucke renal adenocarcinoma in Rana pipiens as determined by histological examination.
p0194 A73-25136
Control mechanisms in physiological rhythms
[NASA-CR-131153] p0179 N73-19064
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
MIZERSKI, J. W.
An interactive hybrid computer system for time domain audio synthesis
[AD-761730] p0369 N73-27968
MIZUNO, N.
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
MOCELLIN, R.
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
MOCKBEE, J.
The value of continued followup in a preventive medicine program
p0145 N73-17072
The management of chronic disease: A study of employee morbidity and mortality at the NASA, Goddard Space Flight Center, 1966 - 1971
p0147 N73-17086
MOCKFORD, J.
Bandwidth reduction of sleep information, Volume 2
[AD-740946] p0605 N73-10167
MOE, G. K.
Atrioventricular transmission.
p0198 A73-25598
MOELLER, G.
The biodynamic aspects of low altitude, high speed flight.
p0096 A73-18471
MOHAN, R.
The effect of illumination level, stroke width and figure ground on legibility of NAMEL numbers.
p0083 A73-16729
MOHLER, J. G.
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213834/1] p0267 N73-23073
MOHLER, S. R.
Functional aging - Present status of assessments regarding airline pilot retirement.
p0387 A73-41161
G effects on the pilot during aerobatics
[FAA-AM-72-28] p0609 N73-11075
The current status of drug use in civil aviation personnel
p0226 N73-21104
MOHR, G. C.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154
MOIBENKO, O. O.
Procedure for recording the rate of pressure changes in heart cavities
p0276 A73-31167
MOISEEVA, L. A.
Transcommisural interaction of monocular systems
p0167 A73-24332
MOISEEVA, T. IU.
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli
p0322 A73-36577
MOISEYEVA, N. I.
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029
MOKHOV, V. Z.
Medical observations of flight personnel suffering from manifestations of arterial hypertension
p0253 N73-21991
MOKHOVA, Y. N.
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005
MOKIEVSKII, K. A.
The photosynthesis of submerged aquatic plants as a function of the intensity of penetrating radiation
p0378 N73-29327
MOLDAVSKAIA, S. I.
Effect of prolonged hypokinesia on the higher nervous activity of humans
p0428 A73-44668
MOLINA, E. A.
Sweat sensor for qualitative measurements.
p0050 A73-14160
MOLINO, J. A.
Pure-tone equal-loudness contours for standard tones of different frequencies.
p0387 A73-41176
MOLLER, A. R.
The middle ear.
p0244 A73-30279
MOLLER, U.
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
MOLLON, J. D.
Reaction time as a measure of the temporal response properties of individual colour mechanisms.
p0046 A73-13757
MOLNAR, G. W.
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
MOLODAVKIN, G. M.
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595
MOLOTKOV, O. Y.
Corticosterone level and the binding capacity of blood plasma proteins under thermal effects
p0045 A73-13749
MOLTON, P. M.
Limitations of terrestrial life.
p0094 A73-18349
Survival of micro-organisms on the moon.
p0115 A73-19111
The prospect of life on Jupiter.
p0202 A73-26478
Survival of common bacteria in liquid culture

under carbon dioxide at high temperatures.
p0284 A73-32650
Is anyone out there - Evidence for the existence of extraterrestial life.
p0312 A73-35657
MONAHAN, J. S.
Extraretinal feedback and visual localization.
p0579 A73-10437
MONEY, K. E.
Measurement of susceptibility to motion sickness
p0225 N73-21093
MONOD, H.
The capacity for muscular work in acute hypoxia
p0331 A73-36946
MONTAGUTI, A.
Advantages offered by the use of fructose as monosaccharide added to saline solutions used in the oral rehydration of individuals suffering from gastroenteritis
[NASA-TT-F-14596] p0609 N73-11078
MONTGOMERY, K. B.
Study of nitrogen balance and creatine and creatinine excretion during recumbency and ambulation of five young adult human males.
p0325 A73-36786
MONTI, P. M.
Cognitions and 'placebos' in behavioral research on ambient noise.
p0406 A73-42950
MONTOYE, H.
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
MONTY, R. A.
Keeping track of sequential events - Implications for the design of displays.
p0423 A73-43215
MOONEY, L. G.
Initial radiation exposure from nuclear weapons
[AD-745906] p0610 N73-11084
MOORE, C. B.
Compounds of the organogenic elements in Apollo 11 and 12 lunar samples - A review.
p0095 A73-18418
MOORE, M. C.
Circadian rhythm of urinary calcium excretion during immobilization.
p0247 A73-30512
MOORE, M. L.
A characterization of the visibility process and its effect on search policies
p0294 N73-24130
MOQUIN, R. B.
Accelerated coagulation of whole blood and cell-free plasma by bubbling in vitro.
p0325 A73-36782
MORAN, W. H.
Estimation of vasopressin excretion in the Urin. as a method of monitoring vasopressin secretion during space flight
p0174 N73-18108
MORASSO, P.
Adjustment of saccade characteristics during head movements.
p0201 A73-26222
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452
MORCH, J. E.
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469
MORET, P.
Cardiocirculatory adaptation to chronic hypoxia. III - Comparative study of cardiac output, pulmonary and systemic circulation between sea level and high altitude residents.
p0059 A73-15523
MORGAN, B. B., JR.
Applicability of research on sustained performance, endurance, and work-rest scheduling to the development of concepts and doctrine of continuous operations
p0271 N73-23988
MORGAN, L. E.
Current developments in restraint systems.
[SAE PAPER 730291] p0306 A73-34656
MORGAN, P. A.
Behavioural awakening and subjective reactions to indoor sonic booms.
p0059 A73-15592
MORGANE, P. J.
Maturation of neurobiochemical systems related to the ontogeny of sleep behavior.
p0051 A73-14262
MORI, L. H.
Cytologic aspect of RF radiation in the monkey, part 1
[AD-749583] p0108 N73-15128
MORI, S.
Electromyographic study on human standing posture in experimental hypogravic state.
p0582 A73-11211
MORISON, W. B.
Breathing metabolic simulator
p0075 N73-13850
MORITA, R. Y.
Microbial activities in hyperbaric environments
[AD-745334] p0596 N73-10096
MORITZ, W. E.
Evaluation of Marine Corps battery powered electrically heated diving dress
[AD-749847] p0102 N73-14101
A diver monitoring system for physiologic studies in all hyperbaric environments
[AD-754399] p0224 N73-20154
MORONEY, W. P.
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and P-3 Navy aircraft.
p0050 A73-14161
The use of bivariate distributions in achieving anthropometric compatibility in equipment design. I, II.
p0081 A73-16702
Comparative motion sickness symptomatology and performance decrements occassioned by hurricane penetrations in C-121, C-130, and P-3 Navy aircraft
[AD-743928] p0596 N73-10100
Empirical reduction in potential user population as the result of imposed multivariate anthropometric limits
[AD-752032] p0151 N73-17124
A limited review of the effect of cigarette smoking on performance with emphasis on aviation
[AD-754421] p0267 N73-23071
MOROSANOVA, V. I.
A dynamic image of spatiotemporal structure
p0393 A73-41887
MOROZ, V. F.
Technique for recording muscle biopotentials by means of implanted electrodes
p0281 A73-31799
MOROZOV, G. B.
An assembly for electrophysiological and thermometric studies
p0402 A73-42663
MOROZOV, V. N.
Harmful effects of vibrations
p0088 A73-17748
MOROZOV, V. S.
Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072
MORRIS, J. J.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
MORRIS, J. J., JR.
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
MORRISON, D. R.
Applications of remote sensing in public health.
p0363 A73-39866
MORROW, P. E.
Theoretical and experimental models for dust deposition and retention in man
[UR-3490-169] p0107 N73-15121
MORSE, E. W.
A non-Newtonian model for fluid flow in the

Semicircular canals.
p0315 A73-36431

MORSE, H. L.
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095

MORTAGY, A. K.
Self determined work-rest cycles in the heat
p0271 N73-23987

MOSER, E. A.
On the approximation of the optical modulation transfer function /MTF/ by analytical functions.
p0121 A73-20264

MOSHKALO, Z. S.
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104

MOSHKOV, D. A.
Investigation of the infrastructural organization of interdisk spaces and photoreceptor membranes of the retina in vertebrates during aldehyde fixations, delipidization, and pronase treatment
p0168 A73-24458
The ultrastructural organization of the photoreceptor membranes and the intradisc spaces of the vertebrate retina as revealed by various experimental treatments.
p0204 A73-26717

MOSHKOV, K. A.
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638

MOSHKOV, V. N.
New data in the use of therapeutic exercise in diseases of the peripheral vessels
[NASA-TT-F-15043] p0374 N73-29045

MOSKAL'ONOV, A. V.
Analysis of the spectra in a 'man-machine' system
p0159 A73-22971

MOSKVITIN, E. V.
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

MOSOLOV, A. N.
Y-chromosome localization in the interphase nuclei of cerebral neurons in man
p0582 A73-11444

MOSS, G.
High altitude pulmonary edema
[AD-756940] p0294 N73-24127

MOST, A. S.
Effect of free fatty acid on myocardial function during hypoxia.
p0241 A73-29572

MOTORINA, N. V.
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942

MOTSNYI, P. E.
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003

MOUGEY, E. H.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
Thyroid responses to simulated altitude.
p0157 A73-22926

MOULOPOULOS, S. D.
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506

MOULTON, D. L.
Evaluation of airborne audio-video recordings as a tool for training in the A-7D tactical fighter
[AD-744041] p0605 N73-10161

MOURITZEN, G.
A urine volume measurement system
[NASA-CR-128726] p0141 N73-16095

MOUSHEGIAN, G.
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281

MOWBRAY, G. H.
Analysis of transient visual sensations above the flicker fusion frequency.
p0129 A73-21566

MOXLEY, R. T., III
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

MOYER, C. B.
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095

MOYER, J. H.
Atherosclerosis and coronary heart disease.
p0320 A73-36531

MOZGOVOI, V. D.
Electrophysiological correlates of mental activity
p0092 A73-18159

MU-CHEN, Y.
Analysis of electrocardiograms of Rhesus monkeys (Macaca mulatta)
[NASA-TT-F-14675] p0136 N73-16062

MUCKLER, F. A.
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701

MUELLER-LIMMROTH, W.
Variations of evoked potentials during various mental stress situations
p0047 A73-13825
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157

MUELLER, W.
Experience with the method of Grabecki and coworkers for the determination of urine delta-aminolevulinic acid in the prevention of lead poisoning
[NASA-TT-F-14864] p0229 N73-21128

MUENCHEN, K.
Decompression experiments with animals as a function of the water balance of the organism
[DLR-FB-71-20] p0099 N73-14075

MUKHAMETOV, L. M.
The impulse activity of thalamic cells in various phases of sleep and wakefulness
p0257 N73-22030

MUKHIN, L.
Investigating for life on other planets
p0416 N73-30985

MUL'DAROV, V. K.
Bioelectric correlates of operative adjustment
p0394 A73-41891

MULDER-HAJONIDES VAN DER MEULEN, W.
Mental load and the measurement of heart rate variability.
p0250 A73-30881

MULDER, G.
Mental load and the measurement of heart rate variability.
p0250 A73-30881

MULDOON, T. L.
Response variations of a microphone worn on the human body
[BM-RI-7810] p0376 N73-29058

MULLINS, C. B.
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889

MULLINS, D. W., JR.
Proteins and nucleic acids in prebiotic evolution.
p0090 A73-17937

MULLINS, G. L.
An ultrasonic displacement instrument with greater beam dispersal.
p0408 A73-43109

MULLINS, L. J.
Characterization and properties of medical grade Pu-238 fuels
[LA-DC-72-473] p0067 N73-12115
MUMINOV, F. A.
The radiation regime and the heat balance of a cotton field and the cotton crop
p0378 N73-29323
MUNCEY, J. P. J.
Stimulus specificity in the human visual system.
p0407 A73-42960
MUNIPOV, V. M.
Ergonomics principles and recommendations, no. 2
[NASA-TT-F-14888] p0232 N73-21150
The human factor in contemporary technology
[JPRS-58792] p0260 N73-22050
Ergonomic prerequisites for artistic designing
p0413 N73-30080
MUNOZ, E. F.
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399
MUNRO, H. N.
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218
MURAO, M.
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319
MURATA, H.
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319
MURAWCZYK, C.
Water recovery and solid waste processing for aerospace and domestic applications
[NASA-CR-128839] p0190 N73-19161
MURAYENKO, V. M.
Viscoelastic properties of arteries in conditions of reduced partial oxygen pressure in the inhaled air
p0253 N73-21987
MURPHY, G. L.
Study to validate the Non-Interference Performance Assessment (NIPA) technique
[NASA-CR-128865] p0190 N73-19164
MURPHY, T. J.
Lighting for difficult visual tasks.
p0247 A73-30498
MURRAY, D. M.
NASA's contributions to patient monitoring, appendix
[NASA-CR-131538] p0230 N73-21138
MURRAY, H. H.
Combined environmental stresses
p0106 N73-15110
MURRAY, R. W.
Waste Management System overview for future spacecraft.
[ASME PAPER 73-ENAS-18] p0350 A73-37974
Domestic applications for aerospace waste and water management technologies
p0075 N73-13849
Water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Appendices
[NASA-CR-134027] p0420 N73-31016
Water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report
[NASA-CR-134028] p0420 N73-31017
MURRAY, T.
Speech discrimination in noise and hearing loss at 3000 Hertz
[AD-752974] p0298 N73-25118
MURRELL, K. F. H.
Industrial work rhythms.
p0287 A73-33160
MUSACCHIA, X. J.
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169
Helium-cold induced hypothermia in the white rat.
p0205 A73-26975
The role of depressed metabolism in increased radio resistance
[NASA-CR-130381] p0133 N73-16038
MYERBURG, R. J.
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445
Electrocardiographic diagnosis of sinus node rhythm variations and SA block.
p0319 A73-36520
MYERS, C. K.
Binaural improvement in normal and defective ears in a background of other voices
[AD-746101] p0597 N73-10103
MYERS, K. J.
Brightness additivity for a grating target.
p0246 A73-30398
MYERS, R. D.
Deep hypothermia induced in the golden hamster by altering cerebral calcium levels.
p0077 A73-16151
MYERS, R. E.
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166
MYERS, T. I.
Psychobiological factors associated with monotony tolerance
[AD-747272] p0071 N73-13098
MYERS, T. S.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085
MYERS, W. D.
Some interactions among driver, vehicle, and roadway variables in normal driving
p0601 N73-10131
MYHRE, L. G.
Validity of Haldane calculation for estimating respiratory gas exchange.
p0310 A73-35463
MYLES, W. S.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056

N

NABER, D. G.
Effects of facial hair in oxygen masks
[AD-754075] p0232 N73-21154
NACHTIGALL, D.
New norms and standardization trends for dosimetry and protection against radiation
p0195 A73-25311
NADAREISHVILI, K. SH.
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
NADEL, E. R.
Body temperatures during negative work exercise.
p0048 A73-14112
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Differential thermal sensitivity in the human skin.
p0251 A73-30912
NADEL, M. R.
Bibliography of scientific publications and presentations relating to planetary quarantine: 1966 - 1971
[NASA-CR-131889] p0258 N73-22038
Scientific publications and presentations relating to planetary quarantine. Volume 5: The 1972 supplement
[NASA-CR-131817] p0297 N73-25112
NAGATA, H.
The macular and paramacular local electroretinograms of the human retina and their clinical application.

p0237 A73-28364

NAGEL, D. C.
An earphone coupling system for acute physiological studies.
p0581 A73-10829

NAGORNYI, S. I.
Evaluation of the physical conditions of individual airmen
p0425 A73-43790

NAIDEL', A. V.
The interaction between muscle groups in a complex motor act in humans
p0125 A73-21320

NAIDINA, V. P.
Spectral method of trace element determination in biological sample solutions
p0088 A73-17692

NAIMITENKO, L. V.
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850

NAIR, C. S.
Effect of altitude acclimatization and simultaneous acclimatization to altitude and cold on critical flicker frequency at 11,000 ft. altitude in man.
p0589 A73-12562

NAIR, K. G.
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687

NAISH, J. M.
Control information in visual flight
p0600 N73-10125

NAKAHAMA, H.
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223

Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989

NAKASHIMA, D. B.
The effects of reinforcement and responding to both signal and non-signal events on vigilance performance
[AD-747798] p0072 N73-13103

Vigilance performance as a function of type and latency of response to the signal event
[AD-747801] p0073 N73-13110

NANOBASHVILI, Z. I.
Effect of stimulation of the mesencephalic reticular formation on the convulsive electrical activity of the brain
p0245 A73-30381

NARBEKOV, O. N.
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232

Influence of stepped adaptation to high-mountain conditions on the respiratory function and acid-alkali equilibrium in the blood during different motor activity regimes of subjects
p0372 N73-29030

NARBSKI, J.
Internal cerebral ""set point'' temperature model in warm-blooded animals
[NASA-TT-F-15138] p0437 N73-32002

NARIKASHVILI, S. P.
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958

NARINSKAIA, A. L.
Diurnal psychic working capacity dynamics under conditions of continuous 72-hr wakefulness
p0124 A73-20989

NARINSKAYA, A. L.
Diurnal dynamics of psychic performance during 72 hour continuous wakefulness
p0135 N73-16056

NATSUI, T.
Threshold PaCO2 as a chemical stimulus for ventilation during acute hypoxia in dogs.
p0239 A73-28534

NAU, G. J.
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523

NAUMANN, H. J.
Design principles for contamination abatement in scientific satellites.
p0584 A73-11991

NAUMOVA, L. A.
Health evaluation of electron beam welding of beryllium bronze
p0190 N73-19531

NAYATANI, Y.
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844

NEBYLITSYN, V. D.
Electrophysiological correlates of mental activity
p0092 A73-18159

NECHITAILO, G. S.
Effects of space flight factors on Drosophila.
p0397 A73-42173

NEDVETSKAIA, G. D.
A new phenomenon of an active intraorgan pumping function of skeletal muscles
p0206 A73-27446

NEFEDOV, IU. G.
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690

NEFEDOV, Y. G.
Gas chromatographic investigations of volatile products of human metabolism accompanying reduced food intake and starvation
p0064 N73-12091

General regularities of the reaction of the human organism to the combined influence of environmental factors characteristic for a spacecraft cabin
[NASA-TT-F-15020] p0374 N73-29041

NEFEDOVA, M. V.
Study of reactions of human otorhinolaryngological organs during hypokinesia
p0256 N73-22015

NEIFAKH, S. A.
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638

NELSON, D. E.
An 8-channel, ultrasonic, marine bio-telemetry transmitter utlizing C/MOS (Complementary Metal-Oxide Semiconductor) digital integrated circuits
[AD-748605] p0074 N73-13119

NELSON, H. K.
Application of remote sensing techniques for appraising changes in wildlife habitat
p0142 N73-16396

NELSON, J. D.
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784

NELSON, P. L.
Attrition-retention rates of air traffic control trainees recruited during 1960 - 1963 and 1968 - 1970
[FAA-AM-72-33] p0222 N73-20140

NELSON, R. C.
Computer program for activity determinations in the USAFSAM whole-body counter
[AD-745578] p0593 N73-10078

NELSON, W.
Effects of a synchronizer phase-shift on circadian rhythms in response of mice to ethanol or ouabain.
p0357 A73-39481

NEMCHENKO, I. A.
Determination of the light status in suspensions of algae
p0378 N73-29325

The theory of photosynthesis of algae
p0378 N73-29326

NEMIROFF, M.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545

NEMISH, V. I.
Investigation of the recovery dynamics of the mimic muscle function and choice of an optimal bioelectric stimulation program with the aid of an electronic digital computer
p0579 A73-10656

NEREM, R. M.
Fluid dynamic aspects of cardiovascular behavior during low-frequency whole-body vibration
[NASA-CR-133843] p0412 N73-30069

NERONI, M.
An attempt to obtain an electroretinographic perimeter
p0308 A73-34963

NESEN, K. I.
Techniques for microinjection of biologically active substances into subcortical structures of the brain
p0322 A73-36574

NEUBERT, J.
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Wing anomalies of the flour beetle tribolium confusum caused by O-G simulation
p0367 N73-27952

NEUFELD, H. M.
Pathology of angina pectoris.
p0085 A73-17276

NEUZIL, E.
Studies on pre-biological evolution. 3: Black azulmic acids obtained from ammonium cyanide
[NASA-TT-F-14640] p0070 N73-13089

NEVEROV, V. P.
Role of the visual cortex in the organization of nystagmic reactions evoked by optokinetic stimulation
p0092 A73-18165

NEVINS, R. G.
Thermal comfort - New directions and standards.
p0325 A73-36785
Performance and life support in altered environments
[AD-754216] p0224 N73-20157

NEVSKAIA, A. A.
Interaction between contours in visual masking
p0345 A73-37395

NEVZGODINA, L. V.
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169

NEWBERRY, P. D.
Effect of hydrochlorothiazide on +Gz tolerance in normotensives.
p0050 A73-14159

NEWMAN, M.
Visual field.
p0079 A73-16478

NEWTON, P. E.
Effect of carbon monoxide on time perception.
p0381 A73-40000
The effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123

NEYMAN, J.
Proceedings of the 6th Berkeley Symposium on Mathematical Statisitics and Probability. Volume 5: Darwinian, neo-Darwinian, and non-Darwinian evolution
[NASA-CR-131508] p0229 N73-21131

NEZLINA, N. I.
Changes in the amplitudinal and temporal characteristics of sensomotor-cortex evoked potentials after deactivation of spinocervical tracts in cats
p0118 A73-20004

NICHOLSON, A. N.
Aircrew workload during the approach and landing.
p0351 A73-38005
Use of hypnotics by aircrew. 1: Operational considerations and experimental studies
p0226 N73-21106
Use of hypnotics by aircrew: Adaptive tracking as a technique for the evaluation of performance decrements related to the flying task
p0227 N73-21109

NICHOLSON, T.
Work, rest and safety in the air.
p0282 A73-32059

NICKERSON, R. S.
Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123

NICOLIS, G.
Biological order, structure and instabilities
p0281 A73-31824

NICU, M. D.
Problems of space medicine and cosmic biology
p0056 A73-14589

NIEDERBERGER, M. W.
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946

NIELSEN, J. P.
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297

NIELSEN, J. M.
Annual report for 1971 to the USAEC Division of Biology and Medicine. Volume 2: Physical sciences. Part 2: Radiological sciences
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069

NIEWIADOMSKA-SKOLASINSKA, K.
Coronary circulation in states of hypoxia and emotional stress
p0088 A73-17770

NIINIKOSKI, J.
Development and reversibility of pulmonary oxygen poisoning in the rat.
p0247 A73-30516

NIKIFOROVA, I. P.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736

NIKOLAYEV, A. G.
The second orbital flight
[NASA-TT-F-15076] p0417 N73-30992

NIKOLSKII, L. N.
Investigation of the possibility of recording the human electroencephalogram under the influence of muscle noise
p0443 N73-33025

NILSON, K.
Polarcardiographic responses to maximal exercise and to changes in posture in healthy middle-aged men.
p0285 A73-33114

NILSSON, H.
Ambient temperature rise effects on pilot performance in a flight simulator
p0331 A73-36948

NISHI, H. Y.
Intravascular changes associated with hyperbaric decompression - Theoretical considerations using ultrasound.
p0155 A73-22534

NISHIKAZE, O.
Fractioning and determination of corticosteroids in urine by thin layer chromatography
[RAE-LIB-TRANS-1694] p0333 N73-26062

NISSIM, S.
A clinical method for obtaining pattern visual evoked responses.
p0236 A73-28357

NIVEN, J. I.
Observations on perceived changes in aircraft attitude attending head movements made in a 2-g bank and turn.
p0117 A73-19485

NIXON, P. G. F.
P wave of electrocardiogram in early ischaemic heart disease.
p0048 A73-13892
Understanding the atrial sound.
p0199 A73-25696

NOAH, J. C.
Effect of low humidity on human performance
[AD-756835] p0296 N73-24142

NOBLE, D.
The repolarization process of heart cells.
p0197 A73-25593

NODA, H.
Neurophysiological correlates of eye movements in the visual cortex.
p0317 A73-36450

NODDIN, E. M.
Psychological effects of prolonged exposure to

sonar signals at an elevated intensity. 1: Five days' exposure to signals at 85 dB [AD-744938] p0594 N73-10087
Psychological effects of prolonged exposure to sonar signals at an elevated intensity. 2: Twenty-four days exposure to signals at 85 dB [AD-746103] p0611 N73-11089
Studies in enlisted submariner motivation. 1: Some etiological factors related to devolunteering of submarine school candidates [AD-749324] p0260 N73-22054

NODINE, C. F.
Influence of stimulus symmetry on visual scanning patterns. p0311 A73-35494

NOGUCHI, K.
Brightness functions for a complex field with changing illumination and background. p0235 A73-28100

NOGUES, C.
Hepatic lesions observed among flight crews following aviation accidents p0330 A73-36933

NOLDE, T. V.
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method p0184 N73-19110

NOLTE, H.
Results of electron microscopic studies in the rat brain under oxygen at high pressure. p0195 A73-25330

NOORDERGRAAF, A.
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue. p0159 A73-23174

NORMAN, D. A.
Need for within-trial feedback as a function of task similarity in adaptive training of manual control. p0081 A73-16709

NORREN, D. V.
Cone spectral sensitivity studied with an ERG method. p0236 A73-28358

NORTH, R. A.
Double cross-validation of video cartographic symbol location performance. p0082 A73-16719

NORTH, W. D.
The probabilistic structure of planetary contamination models [NASA-CR-130558] p0148 N73-17103

NORTON, J. M.
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460

NOSKOV, V. B.
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone p0305 A73-34233
Effect of hypodynamia and other spaceflight factors on the excretion of 17-hydroxycorticosteroids and aldosterone p0373 N73-29031

NOSSAMAN, E. O.
Differential velocity and time prediction of motion. p0285 A73-32900

NOVAK, L.
Dynamic katathermometer for measuring the cooling effect of an ambient medium p0280 A73-31512

NOVAKOVSKI, V.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems p0255 N73-22008

NOVICHENKO, L. I.
Role of arterial and venous vessels of limbs in the process of cardiovascular reflex responses p0322 A73-36578

NOVIK, I. M.
Problems of man's interaction with his natural environment [JPRS-58113] p0151 N73-17121

NOVIKOV, A. A.
Modification of the electroencephalograph 4EEG-1 for polygraphy p0154 A73-22370

NOVIKOVA, R. T.
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels p0383 A73-40284

NOWAK, E.
Angular measurements of foot motion for application to the design of foot-pedals. p0580 A73-10773

NOWLIS, D. P.
Tektite 2 habitability research program: Day-to-day life in the habitat [NASA-CR-130034] p0140 N73-16094

NOYES, F.
Bone strength and in-flight mechancial stresses [AD-754982] p0221 N73-20134

NOZDRACHEV, A. D.
Shaping device for frequency analysis of electrical processes in peripheral neural stems and ganglia p0402 A73-42664

NUCCIO, P. P.
Upgrading and extended testing of the MSC integrated water and waste management hardware [NASA-CR-128878] p0222 N73-20142

NUKHARYANOV, N. M.
Negative pressure on the lower half of the human body and the volume of circulating plasma p0444 N73-33036

NURIDZHANOVA, A. A.
Effects of vagotomy on the impulse activity of respiratory neurons p0276 A73-31160

NURITDINOV, E. N.
Spatial analysis in monkeys of various ages after extirpation of the parietal areas of the cerebral cortex p0167 A73-24329

NUTTER, D. O.
Assessment of left ventricular dimensions and function by echocardiography. p0289 A73-34038

O

O'BRYAN, P. M.
Generator potentials in invertebrate photoreceptors. p0160 A73-23307
Responses to single photons. p0160 A73-23308

O'HANLON, J. F.
Neuroendocrine, cardiorespiratory, and performance reactions of hypoxic men during a monitoring task. p0154 A73-22527

O'ROURKE, R. A.
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization. p0587 A73-12443
A rapid method for frontal plane axis determination in scalar electrocardiograms. p0243 A73-30063
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities. p0436 A73-45400

OAKLEY, C. M.
Q waves and coronary arteriography in cardiomyopathy. p0583 A73-11507

OATLEY, K.
Vernier acuity as affected by target length and separation. p0041 A73-13063
The explanation and investigation of biological rhythms. p0286 A73-33155

OBARA, T.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems p0255 N73-22008

OBATA, S.
Relation between vibratory sensibility and electric signal of living body.
p0403 A73-42680
OBERG, B.
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
OBERMAYER, R. W.
Measurement for flight training research.
p0083 A73-16726
OCHSMAN, H. B.
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241
OCONNOR, P. J.
AVMED policy on sleep in aircrew
p0227 N73-21108
ODESSEY, R.
Oxidation of leucine by rat skeletal muscle.
p0077 A73-16152
Oxidation of amino acids by diaphragms from fed and fasted rats.
p0077 A73-16153
ODLE, M. L.
ATC angle of attack training
[AD-757243] p0269 N73-23090
OESEBURG, B.
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217
OGANOV, V. S.
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/
p0279 A73-31504
Functional state of the skeletal muscles of rats during prolonged restriction of mobility (up to 120 days)
p0262 N73-23028
OGDEN, T. E.
The oscillatory waves of the primate electroretinogram.
p0245 A73-30393
OGORODNII, V. V.
Universal transistorized stimulator with external control
p0084 A73-16739
Functional organization of the mechanisms of presynaptic inhibition evoked by stimulation of cutaneous afferents
p0118 A73-20003
OHANLON, J. F.
Some observations from a literature review to anticipate biological problems that might arise in sustained and continuous operations
p0271 N73-23989
OKESON, G. C.
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
OKROPIRIDZE, Z. A.
Modification of a ballisto-oscillograph for extremities
p0157 A73-22865
OKUYAMA, D.
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
OLDER, H. J.
Measurement of operator workload in an information processing task
[NASA-CR-2150] p0070 N73-13087
OLDIGES, H.
Antidotes for alkyl phosphate poisoning: Structure-effect relations in vivo and in vitro
[BMVG-FBWT-72-8] p0137 N73-16072
OLDHAM, M.
Human response to transportation noise and vibration.
p0310 A73-35328
OLESEN, J.
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man.
p0324 A73-36659
OLKOWSKI, Z.
Response of motoneurons of the spinal cord to gamma radiation - A cytochemical study.
p0047 A73-13808
OLLANDER, B.
Muscle metabolites with exhaustive static exercise of different duration.
p0078 A73-16247
OLLERHEAD, J. B.
Methods for quantifying the effect of noise on people.
p0392 A73-41707
OLREE, H. D.
An evaluation of the effects of bed rest, sleep deprivation and discontinuance of training on the physical fitness of highly trained young men
[NASA-CR-134044] p0438 N73-32008
An evaluation of the Exer-Genie exerciser and the Collins pedal mode ergometer for developing physical fitness
[NASA-CR-134046] p0440 N73-32023
OLSCZAK, W.
On the influence of individual elastic properties of the human body on the results of arterial pressure measurement
p0099 N73-14072
OLSEN, E. G. J.
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507
OLSON, G. M.
Differences in the speed of mentally processing displays containing information about right and left
[AD-759723] p0334 N73-26070
OLSSON, G. E.
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
OMAN, C. M.
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
ONDERCIN, P. A.
Distribution of ocular dominance and effect of image clarity.
p0153 A73-21893
ONIANI, T. N.
Structural change in the paradoxical phase of sleep due to the stimulation of the reticular formation and hypothalamus on a background of deep slow sleep
p0582 A73-11081
Dynamics of electrical activity in the neocortex and hippocampus when hunger and thrist are satisfied
p0157 A73-22862
Nature and significance of periodic electrical activity variations in the neocortex and the hippocampus during the paradoxical phase of sleep
p0199 A73-26083
The nature and significance of the dynamics of electrical activity in the neocortex and hippocampus during the paradoxal phase of sleep
p0429 A73-44718
The effects of electrical activity and excitability of certain limbic and mid-brain structures during various phases of sleep
p0257 N73-22031
ONISCHAK, M.
Carbon dioxide adsorbent study
[NASA-CR-114661] p0420 N73-31013
ONISHCHENKO, E. L.
Some questions of the discrete control of deep-water manipulators
p0335 N73-26078
ONISHCHENKO, V. F.
Engineering psychology in aviation and astronautics
p0278 A73-31375
ONLEY, J. W.
Threshold and suprathreshold perceptual color differences.
p0275 A73-31019
OOKUBO, S.
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059

OPARIN, A. I.
Molecular evolution: Prebiological and biological.
p0089 A73-17926
Protein-lipid films as prototypes of biological membranes.
p0091 A73-17949
OPMEER, C. H. J. M.
Towards an objective assessment of cockpit workload. I - Physiological variables during different flight phases.
p0247 A73-30515
The information content of successive RR-interval times in the ECG - Preliminary results using factor analysis and frequency analysis.
p0251 A73-30883
ORBAN, G.
Movement perception during voluntary saccadic eye movements.
p0308 A73-34845
ORD, J. W.
Biomedical acceptability of 45- to 60-day space flight
[NASA-CR-129131] p0609 N73-11074
ORGEL, L. E.
A possible step in the origin of the genetic code.
p0162 A73-23469
Prebiotic activation processes.
p0383 A73-40372
Directed Panspermia.
p0428 A73-44553
ORLADY, H. W.
Pilot incapacitation.
p0170 A73-24717
ORLOVA, T. A.
Problem of studying the toxicity of indole
p0183 N73-19102
Joint effect of stimulators and tranquilizers on performance of a man-operator
p0256 N73-22021
ORNER, G. M.
Environmental control unit for damage control suit system
[AD-749025] p0075 N73-13125
ORO, J.
Chemical evolution - Recent syntheses of bioorganic molecules.
p0202 A73-26477
Organic analysis of lunar samples and the Martian surface.
p0396 A73-42163
ORRELL, R. R.
Surface contaminants.
p0096 A73-18547
OSENNII, O. S.
Origin of the external electric field detected near animals and men
p0166 A73-23942
OSER, H.
Extreme aeroembolism and its successful treatment in hyperbaric chamber
p0368 N73-27959
OSHANIN, D. A.
Psychological problems of activity regulation
p0393 A73-41884
The operativeness of an image of a controlled process
p0393 A73-41885
The dynamics of operative images in extrapolation tracking processes
p0393 A73-41886
A dynamic image of spatiotemporal structure
p0393 A73-41887
OSIPOV, IU. IU.
Water and salt metabolism in hypokinesia-subjected animals
p0207 A73-27704
OSIPOV, Y. Y.
Water mineral metabolism in animals subjected to restricted mobility
p0216 N73-20098
OSIPOVA, M. M.
Study of the physiological effect of replacing atmospheric nitrogen in the air with inert gases under conditions of oxygen insufficiency and increased concentrations of carbon dioxide
p0182 N73-19094
OSNITSKII, A. K.
Effect of exercise on the response time in an identification problem
p0394 A73-41894
OSTADAL, B.
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564
OSTAPENKO, O. F.
Biological effect of a fine sample of lunar soil returned to earth by the automatic station Luna 16.
p0056 A73-14569
OSTASHKOV, K. V.
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
OSTRANDER, L. E.
Fundamental frequency analysis of pulmonary mechanical resistance and compliance.
p0433 A73-45067
OSTRAVSKAYA, G. Z.
Effect of packaging and some use conditions for drugs in pharmacies carrying emergency reserves
p0218 N73-20114
OSTRETSOVA, I. B.
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
OSTROVSKAIA, G. Z.
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
OSTROVSKIY, V. F.
Some physiological reactions in pilots during training and during flight
p0254 N73-22001
OTERO, G.
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
OTIS, A. B.
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219
OTTO, F. J.
Biological effects of fast neutrons. Mortality and changes in blood cell count of mice after complete exposure to fast neutrons and X-rays
[BMVG-FBWT-72-16] p0138 N73-16077
OUTEBRIDGE, J. S.
Frequency content of nystagmus.
p0237 A73-28502
OVCHINNIKOVA, O. V.
Emotional state and efficiency
p0414 N73-30085
OVER, R.
Influence of border and background on perception of straightness.
p0585 A73-12081
Orientation illusion and masking in central and peripheral vision.
p0041 A73-12999
Tilt discrimination and aftereffect with stroboscopic display of contours.
p0096 A73-18624
Colour selectivity in orientation masking and aftereffect.
p0200 A73-26196
Stereoscopic depth aftereffects with random-dot patterns.
p0308 A73-34841
Spatial determinants of the aftereffect of seen motion.
p0346 A73-37415
OVERINGTON, I.
Interaction of vision with optical aids.
p0390 A73-41608
Modeling of random human visual search performance based on the physical properties of the eye
p0190 N73-19961
OVSYANNIKOV, A. V.
Effect of immersion on certain motor function indices
p0180 N73-19081

OVSYANNIKOV, V. A.
The first experiment in building an airtight magnetomechanical master-slave manipulator
p0336 N73-26086
OWEN, C. A.
Cardiac arrhythmias during exercise testing in healthy men.
p0196 A73-25336
An exercise prescription intervention program with periodic ergometric grading
p0145 N73-17067
OWENS, J. H.
Individual differences as a function of four choice informational load and s-r compatibility [AD-752073]
p0150 N73-17115
OYAMA, J.
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Changes in functional construction of bone in rats under conditions of simulated increased gravity.
p0312 A73-35863
OYAMA, V. I.
Search for biogenic structures and viable organisms in lunar samples - A review.
p0094 A73-18416
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485
Biological effects of fuel and exhaust components from spacecraft descent engines employing hydrazine [NASA-TM-X-2714]
p0107 N73-15118
OYSTER, C. W.
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455
OZEROVA, O. E.
Temperature conditions and blood supply of the brain in animals
p0304 A73-34229
OZEROVA, O. Y.
Temperature regimes and cerebral blood supply of animals
p0372 N73-29026
OZERSKII, M. I.
A comparative evaluation of the energy of lethal doses of gamma radiation, visible light and the energy of cellular basal metabolism [AD-746750]
p0072 N73-13102

P

PACE, N.
The diluter-demand oxygen system used during the international Himalayan expedition to Mount Everest.
p0194 A73-25145
A monkey metabolism pod for space-flight weightlessness studies.
p0313 A73-35963
Metabolic responses of monkeys to increased gravitational fields.
p0314 A73-35982
Glycolytic intermediates and adenosine phosphates in rat liver at high altitude /3,800 m/.
p0358 A73-39602
Physiological responses to environmental factors related to space flight [NASA-CR-129518]
p0066 N73-12107
PACKER, J. E.
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
PACKER, J. S.
An analogue-computer simulation of the facultative water-reabsorption process in the human kidney - A vascular role for a.d.h.
p0402 A73-42668
PADMOS, P.
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Visually evoked cortical potentials to patterned stimuli in monkey and man [IZF-1972-24]
p0264 N73-23049
PAFFRATH, D.
Research at the DFVLR in the field of environmental protection. Part 2: Noise abatement, water and landscape, technology [DLR-MITT-72-15]
p0232 N73-21153
PAGE, H. J.
Investigation of biowaste resistojets for space station application [NASA-CR-112159]
p0112 N73-15161
PAIKOVA, L. N.
Bioelectric and vegetative components of conditioned reflexes of 'negative-emotional type'
p0362 A73-39797
PAIVA, M.
Gas transport in the human lung.
p0400 A73-42421
PAK, Z. P.
Advanced methods of recovery for space life support systems.
p0347 A73-37711
Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028
PAKHLEVANIAN, K. Z.
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
PAKHOMOVA, T. G.
Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles
p0576 A73-10155
PAL'TSEV, E. I.
Reflex reaction of antagonist muscles during an evoked tendon reflex
p0170 A73-24598
PALAMARCHUK, A. I.
Study of erroneous actions of flying personnel
p0094 A73-18258
PALKAMA, A.
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
PALLEY, M.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
PALMBAKH, L. H.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness [NASA-TT-F-14624]
p0592 N73-10072
PALMER, E.
Pilot performance with a simulated ILS independence pictorial display
p0599 N73-10122
PALMER, H. E.
Kinetic aspects of bone mineral metabolism [NASA-CR-128816]
p0186 N73-19130
PALOS, L. A.
Biological role of atmospheric oxygen in the mechanism of blood coagulation
p0087 A73-17678
Biological role of atmospheric oxygen in the blood coagulation mechanism
p0063 N73-12079
PANAKHOVA, E. N.
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation
p0428 A73-44550
PANCHENKO, V. A.
Preservation of urine in a system for regeneration of water from it
p0183 N73-19099
PANCHENKO, V. S.
Changes in the gas content of blood in man during exposure to high ambient temperatures
p0208 A73-27711
Change in blood content of gases when man is exposed to high ambient temperatures
p0217 N73-20105
PANDOLF, K. B.
Climbing and cycling with additional weights on the extremities.
p0400 A73-42418
PANGBURN, R. C.
Pilot performance as a function of three types of altitude displays

[ASD-TR-72-63] p0074 N73-13117
PANIN, K. I.
Designing control system information models p0414 N73-30082
PANKOVA, A. S.
Morphological changes in the juxtaglomerular apparatus of rat kidneys exposed to the action of diversely directed accelerations for many hours p0123 A73-20978
Morphological changes in kidneys during exposure to variously oriented accelerations at a level of 4 g for many hours p0304 A73-34226
Morphological changes in the juxtaglomerular apparatus in the kidneys of rats during multihour exposure to accelerations in different directions p0133 N73-16045
Morphological changes in the kidneys during multihour exposure to 4-g accelerations imparted in different directions p0372 N73-29023
PANNIER, R.
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151
Valvular cardiopathies and tolerance to flight p0115 A73-19209
Renal lithiasis among military operating aircrew p0128 A73-21537
Proteinuria and military aircrew p0128 A73-21539
Antidiabetic medications and aircrew p0128 A73-21541
Antidiabetic medications and navigation personnel p0228 N73-21120
PANOV, A. G.
Neurological fatigue-indices of flight crews of long-range and military transport aviation p0193 A73-25040
PANTLE, A.
Spatial information coding in the human visual system - Psychophysical data. p0309 A73-35240
PAPIAN, N. N.
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station. p0397 A73-42169
PAPILIAN, V.
The effect of low X-ray doses on the central nervous system p0427 A73-44179
PAPPAS, S. P.
Quantitation of buried contamination by use of solvents
[NASA-CR-130720] p0149 N73-17111
PARADE, P.
Drug use and performance p0228 N73-21115
PARAMONOV, IU. V.
Certain problems in modeling nerve networks p0579 A73-10652
Derivation of a function of nerve-fiber distribution according to fiber diameters on the basis of electrophysiological measurements p0060 A73-15787
Approaches to the realization of complex biotechnological systems p0159 A73-23298
PARAMONOV, V. I.
Some questions from the use of reversible follow-up systems with independent follow-up and force reproduction channels p0336 N73-26082
PARASCOS, E. T.
System engineering aspects of the man-machine interface. p0287 A73-33645
PARDAENS, J.
A physical model of expiration. p0577 A73-10169
Peak expiratory flow rate and rate of change of pleural pressure. p0391 A73-41636
PARENT, C.
Pulmonary function in man after short-term exposure to ozone. p0381 A73-40001
PARFENOV, G. P.
Results and prospects of microbiological studies in outer space. p0203 A73-26487
Microbiological investigations in space flights p0279 A73-31501
Microbiological investigations during spaceflight p0262 N73-23025
PARKER, D. P.
Inability of the submaximal treadmill stress test to predict the location of coronary disease. p0130 A73-21802
PARKER, J. A.
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] p0259 N73-22048
PARKER, J. F., JR.
Bioastronautics data book, second edition
[NASA-SP-3006] p0104 N73-15091
Habitability issues in long duration undersea and space missions
[NASA-CR-130537] p0151 N73-17123
Short term hearing loss in general aviation operations, phase 1, part 1
[NASA-CR-130987] p0173 N73-18095
Use of spectral analysis procedures for the evaluation of drug effects p0228 N73-21116
Protection against hearing loss in general aviation operations, phase 2
[NASA-CR-133303] p0341 N73-27078
A review of problems encountered in the recovery of navy aircrewmen under combat conditions
[AD-761636] p0370 N73-27972
A review of the influence of physical condition parameters on a typical aerospace stress effect: Decompression sickness
[NASA-CR-135495] p0418 N73-31002
PARKES, K. R.
The effects of briefing on televisual target acquisition p0191 N73-19972
PARMEGGIANI, P. L.
On the functional significance of subcortical single unit activity during sleep. p0242 A73-29993
PAROMENSKEYA, L. N.
The influence of simazine on the photosynthetic pigments of green algae
[DRIC-TRANS-2992] p0258 N73-22040
PARQUET, P.
Apparent plasma hyperosmolality in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079
PARRISH, R. N.
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving. p0093 A73-18241
PARRY, H. J.
The effect of simulated sonic boom rise time and overpressure on electroencephalographic waveforms and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
PARSHIN, V. S.
Rate of recovery of radioresistance with the combined application of ionizing radiation and dynamic flight factors on the organism p0214 N73-20080
Influence of cystamine combined with sympathomimetic amines on reparative processes following the action of radiation and overloads p0214 N73-20081
Magnitude of the irreversible portion of radiation damage with the combined action of radiation and acceleration p0214 N73-20082
PARSON, H.
The ferrioxalate actinometry system of the microbial response to space environment experiment (M191) p0292 N73-24113
PARTHUN, K.
Complete and isoenzyme content of lactate dehydrogenase in plasma, leukocytes and erythrocytes in myeloproliferative diseases
[NASA-TT-F-14586] p0592 N73-10070
PARVING, H.-H.
Influence of carbon monoxide and of hemodilution

on cerebral blood flow and blood gases in man.
p0324 A73-36659

PASCUAL, M.
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683

PASCUCCI, R. P.
The potential application of space technology to the radio tracking and biotelemetry of unrestrained animals.
p0084 A73-17134

PASCULESCU, G.
The effect of low X-ray doses on the central nervous system
p0427 A73-44179

PASIK, P.
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459

PASIK, T.
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459

PASK, C.
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396
Image detection by a bee ommatidium.
p0424 A73-43344

PASKEVICH, I. P.
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513

PASQUET, J.
Digestive hemorrhages in aircrew - Individual and collective safety
p0332 A73-36952

PASTENA, L.
A program for automatic analysis of biological parameters
[ISS-72/4] p0186 N73-19128

PATACQ-CROUTZET, J.
Detection of atherosclerosis in examinations of flight personnel
p0328 A73-36913

PATE, T.
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124

PATEL, D. J.
Nonlinear analysis of aortic flow in living dogs.
p0384 A73-40640

PATRICK, J. M.
The influence of age, sex, body size and lung size on the control and pattern of breathing during CO2 inhalation in Caucasians.
p0094 A73-18337

PAUL, P.
FFA metabolism in thyroidectomized and normal dogs during rest and acute cold exposure.
p0361 A73-39787

PAULEW, P.-E.
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026

PAULMANN, H.
Oxygen therapy. Observations on the behavior of enzyme activities in plasma after breathing oxygen at high pressure
[DLR-FB-71-96] p0112 N73-15163

PAULSON, O. E.
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man.
p0324 A73-36659

PAVLASEK, IU.
Spinal and spino-bulbo-spinal neuron mechanisms of somatic and viscero-motor reflex transfer in the thoracic spinal cord
p0435 A73-45249

PAVLOV, G. I.
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121

PAVLOV, V. V.
An ergatic organism
p0119 A73-20048

PAVLOVA, T. I.
State of blood filling and bioelectric activity of the brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic-vascular dysfunction
p0443 N73-33027

PAVLOVSKAIA, M. B.
Independence of the recognition of an object's orientation and position in the field of vision
p0167 A73-24331
Independence of the recognition of some spatial properties of an image
p0206 A73-27109

PAYNE, G. H.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

PAYNE, R. M.
Comparison of isometric exercise and angiotensin infusion as stress test for evaluation of left ventricular function.
p0209 A73-27889

PEACOCK, J. B.
A method for the investigation of interpolated information and time effects in short term retention.
p0096 A73-18475

PEACOCK, J. L.
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111

PEASE, V. P.
Effects of a surround upon onset and offset reaction time.
p0044 A73-13558

PECHEUX, M.-G.
A vecto-oculographic approach to fast sleep eye movements in man.
p0242 A73-29994

PECK, C. K.
Single unit and evoked potential responses in cat optic tract to paired light flashes.
p0198 A73-25647

PECORARO, J. M.
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993
Aerospace vehicle water-waste management
p0106 N73-15111

PEDANOV, IU. P.
Physiological mechanisms of evoked-potential habituation in the visual analysor
p0119 A73-20006

PEDERSEN, J. F.
Myocardial contraction velocity and acceleration in man measured by ultrasound echocardiography differentiation.
p0205 A73-27026

PEEKE, S. C.
Focal and nonfocal processing of color and form.
p0388 A73-41182

PEELER, D. J.
Arousal from sleep by noises from aircraft with and without acoustically treated nacelles
[NASA-CR-2279] p0338 N73-27058

PEGDEN, C. D.
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326

PEKSHEV, V. V.
Psychophysiological characteristic of the activity of military-transport-aviation flight crews during low-altitude flights
p0343 A73-37196

PELLETIER, C. L.
Circulatory reflexes from mechanoreceptors in the cardio-aortic area.
p0384 A73-40637

PELOUCH, V.
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564

PENUKHOV, B. N.
Functional disturbances during hypokinesia in man [NASA-TT-F-15148] p0450 N73-33073
PENGELLY, L. D.
Correlation of ventilatory responses to hypoxia and hypercapnia. p0359 A73-39776
PENNINGTON, L. L.
Multiple hormonal responses to graded exercise in relation to physical training. p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training. p0048 A73-14117
Thyroid responses to simulated altitude. p0157 A73-22926
PERRY, J. K.
Responsiveness at the onset of spike-wave bursts. p0156 A73-22695
PEPINE, C. J.
Long-term observations in patients with angina and normal coronary arteriograms. p0097 A73-18871
PEPINE, C. P.
Relationship of anginal symptoms to lung mechanics during myocardial ischemia. p0589 A73-12820
PEPPARD, L. E.
A method for aiding human operator performance in a noncompensatory tracking task. p0578 A73-10323
PEQUIGNOT, H.
Proteinuria and civil aviation aircrew p0128 A73-21538
PERACHIO, A. A.
Histochemical correlates of changes in the primate brain associated with varying environmental light conditions. p0284 A73-32600
PERDRIEL, G.
Ocular tonus and aptitude in flight personnel p0586 A73-12158
Examination of chromatic sense in French aerial forces p0179 N73-19068
PEREIRA, N. C.
Systems analysis optimization and control of life support systems in confined spaces p0294 N73-24131
PERELYGIN, V. V.
Inhibition by selenium of the free-radical states of the retina of the eye p0430 A73-44724
PEREVOSHCHIKOV, IU. O.
Role of nerve structures in the action of low-frequency sinusoidally modulated currents on synovial membrane permeability in the knee joint p0166 A73-23943
PERKINS, D. E.
Compensating for distortion in viewing pictures obliquely. p0387 A73-41178
PERKINS, T.
A deterministic model of a well trained human operator performing compensatory tracking. p0326 A73-36844
Modeling the human in a time-varying anti-aircraft tracking loop. p0352 A73-38071
A deterministic model of a human performing compensatory tracking [AD-746725] p0072 N73-13101
PERNOD, A.
Energy supply in acute cold-exposed dogs. p0324 A73-36655
PERROT, J. P.
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application p0586 A73-12159
PERRY, C. J. G.
Psychiatric and psychometric predictability of test pilot school performance. [AD-754148] p0050 A73-14165
PERRY, C. L.
Metabolic analyzer [NASA-CASE-MFS-21415-1] p0112 N73-15156
PERRY, I. C.
Helicopter flying and colour vision p0180 N73-19075
PERRY, N. W., JR.
Distribution of ocular dominance and effect of image clarity. p0153 A73-21893
Monocular contribution to binocular vision in normals and amblyopes. p0237 A73-28359
PERSON, R. S.
Organization of the activity of a group of motor neurons in man during voluntary contraction of a muscle p0170 A73-24599
PERUO, P., JR.
Digital modeling of human operator dynamics via class of Liapunov functions p0598 N73-10111
PERVUSHIN, V. I.
Human sensorimotor coordination following space flights. p0397 A73-42170
PERWEIN, J.
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells. p0243 A73-30061
PESQUIES, P.
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army p0329 A73-36929
PESSAH, M. A.
Spontaneous middle ear muscle activity in man - A rapid eye movement sleep phenomenon. p0587 A73-12423
PESTOV, I. D.
Organization of the experiments and overall condition of the subjects p0255 N73-22011
Negative pressure on the lower part of the body as a method for preventing shifts associated with change in hydrostatic blood pressure p0256 N73-22017
PETERS, G. L.
Multi-task time-sharing requirements [AD-755363] p0269 N73-23088
PETERSEN, E. S.
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man. p0094 A73-18348
Effect of body temperature on ventilatory transients at start and end of exercise in man. p0275 A73-31127
PETERSEN, H. L.
Medical subject monitoring systems [NASA-CASE-MSC-14180-1] p0259 N73-22045
PETERSEN, P. E.
Fatigue in sustained tactical operations [AD-746643] p0611 N73-11090
PETERSON, D.
Sensitivity to oxygen at high pressure of radioresistant and radiosensitive strains of bacteria. p0117 A73-19483
PETERSON, J. E.
Effect of carbon monoxide on time perception. p0381 A73-40000
The effect of carbon monoxide on time perception [PB-214651/2] p0299 N73-25123
PETERSON, K.
Comparison of ultrasound and cineangiographic measurements of left ventricular performance in patients with and without wall motion abnormalities. p0436 A73-45400
PETERSON, K. L.
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization. p0587 A73-12443
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography. p0130 A73-21801
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the

ascending aorta.
p0281 A73-31996

PETERSON, L. F.
Echocardiographic evaluation of the hemodynamic effects of chronic aortic insufficiency with observations on left ventricular performance.
p0354 A73-38868

PETERSON, R.
Pulmonary mechanical functions in man breathing dense gas mixtures at great depths
[AD-749028] p0100 N73-14082

PETIT, J. M.
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160

PETIT, J.-M.
Adaptation to maximal effort - Genetics and age.
p0361 A73-39792

PETROPSKY, J. S.
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507

PETROV, B. A.
Some questions from the use of reversible follow-up systems with independent follow-up and force reproduction channels
p0336 N73-26082

PETROVSKII, A. M.
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348

PETROUKHIN, V. G.
Biological effect of a fine sample of lunar soil returned to earth by the automatic station Luna 16.
p0056 A73-14569
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090
The mechanism of reduced ability to withstand overloads under the influence of radio-protective pharmacological substances
pC211 N73-20058
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
Method of combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090

PETRY, S.
Time course of lateral inhibition in the human visual system.
p0206 A73-27124

PETTIGREW, J. D.
Gamma-aminobutyric acid antagonism in visual cortex - Different effects on simple, complex, and hypercomplex neurons.
p0424 A73-43338

PETUKHOV, B. N.
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Human sensorimotor coordination following space flights.
p0397 A73-42170
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia
p0134 N73-16052

PEVNII, S. O.
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364

PEVZNER, L. Z.
Topochemical differences in RNA content in spinal cord motoneurons during hypoxia and hypokinesia
p0588 A73-12558

PEVZNER, R. A.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128

PEW, R. W.
Visual pattern matching - An investigation of some effects of decision task, auditory codability, and spatial correspondence.
p0239 A73-29123
Mapping an operator's perception of a parameter space
p0600 N73-10129

PFAFF, J. R.
Effect of hydrochlorothiazide on +Gz tolerance in normotensives.
p0050 A73-14159

PFAFROD, G. O.
Experimental determination of shear moduli in a compact bone tissue
p0045 A73-13742

PFEIFFER, E. A.
Biomedical instrumentation and measurements.
p0312 A73-35860

PFLUG, I. J.
Heat sterilization.
p0288 A73-33695

PFOHL, R.
Experimental methods of correlation between the trajectories of cosmic heavy ions and biological objects: Dosimetric results - Experiment Biostack on Apollo 16 and 17.
p0313 A73-35946

PHATAK, A. V.
Current status of models for the human operator as a controller and decision maker in manned aerospace systems.
p0123 A73-20587
Current status of models for the human operator as a controller and decision maker in manned aerospace systems
p0270 N73-23897

PHELPS, M. E.
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence.
p0361 A73-39790

PHILIPP, U.
Heart rate variability and work-load measurement.
p0250 A73-30879

PHILLIPS, G. B.
Industrial sterilization; Proceedings of the International Symposium, Amsterdam, Netherlands, September 1972.
p0288 A73-33691

PHILLIPS, J. P.
Correlation of computer-quantitated treadmill exercise electrocardiogram with arteriographic location of coronary artery disease.
p0043 A73-13543
Detection of left ventricular asynergy by echocardiography.
p0354 A73-38869

PHILLIPS, L. J.
Some observations concerning saccadic eye movements.
p0245 A73-30389

PHILLIPS, M. S.
A statistical evaluation of the injury potential of a square wave energy absorber
[AD-745919] p0612 N73-11102
Inflatable restraint concept for general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127

PHILLIPS, R. W.
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201

PHILLIPS, W. H.
Cardiovascular changes in middle-aged men during two years of training.
p0127 A73-21504

PHOEBUS, E. C.
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102

PHOTIADES, D. P.
A quick and inexpensive method of monitoring on tape the heart rate during exposure of the human head to pulsed magnetic fields.
p0053 A73-14289

PICCIOLO, G. L.
Method of detecting and counting bacteria in body fluids

[NASA-CASE-GSC-11092-2] p0337 N73-27052
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] p0438 N73-32011
PICENI, H. A. L.
The multiple dipole model of the ventricular depolarisation
[TH-71-E-25] p0067 N73-12116
PICHLER, H. J.
An interesting phenomenon in the case of weightlessness
p0356 A73-39149
PICK, A.
Mechanisms of cardiac arrhythmias - From hypothesis to physiologic fact.
p0347 A73-37582
PICKERING, T. G.
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348
PICKETT, H. M.
Identification and adjustment of psychological factors to improve solar patrol observing.
p0057 A73-14841
Studies of the visual perception of substance
[AD-749372] p0100 N73-14084
On enhancing visual perceptions of solar flare precursors
[AD-760802] p0377 N73-29063
PICTON, T.
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
PIEHL, K.
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
PIERCE, F. G.
Infrasound
p0147 N73-17085
PIERCE, J. E.
Localizing factors in experimental atherosclerosis.
p0320 A73-36536
PIERON, H.
Contribution to the study of factors controlling the rate of summation of luminous impressions from unequal surfaces (retinal heterogeneity)
[NASA-TT-F-15124] p0440 N73-32017
PIERSON, W. R.
Intellectual performance during prolonged exposure to noise and mild hypoxia.
p0325 A73-36783
PIESCH, E.
Future trends of dosimetry with humans
p0195 A73-25314
PIGOTT, V. M.
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932
PIIPER, J.
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639
PIKOVSKII, A. M.
Disturbances of the pilot's efficiency
p0277 A73-31171
PILIAVSKII, A. I.
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funiculs of the cat spinal cord
p0118 A73-20002
PILIPENKO, IU. G.
Complex processing of discrete biological information
p0580 A73-10662
PINEO, G. F.
Red cell flexibility and pressure-flow relations in isolated lungs.
p0158 A73-22927
PINGANNAUD, P.
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army
p0329 A73-36929
PINKERTON, H. K.
Effects of methylene chloride exposure on the spontaneous activity of mice
[AD-751435] p0139 N73-16082
PINOTTI, O.
Changes in blood-flow distribution during acute emotional stress in dogs.
p0238 A73-28533
PINSKY, L. S.
Visual light flash phenomenon, part C
p0233 N73-21763
PIOTROWSKI, M.
Proposals for specification of allowable levels of microwave radiation
p0415 N73-30905
PIPBERGER, H. V.
Computer analysis of the orthogonal electrocardiogram and vectorcardiogram in 939 cases with hypertensive cardiovascular disease.
p0202 A73-26361
P wave analysis in 2464 orthogonal electrocardiograms from normal subjects and patients with atrial overload.
p0399 A73-42341
PIRCHER, L. A.
Telemetry of cardiovasculary parameters on fighter aircraft flying pilots.
p0055 A73-14309
PIRNAY, F.
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285
Exercise during hyperoxia and hyperbaric oxygenation.
p0352 A73-38160
Adaptation to maximal effort - Genetics and age.
p0361 A73-39792
PIRUZIAN, L. A.
Circadian rhythms of free radical state concentrations in the organs of mice.
p0355 A73-39104
PITKIN, E. T.
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Human operator dynamics for aural compensatory tracking
p0602 N73-10142
PITTENGER, J.
Searching for many targets - An analysis of speed and accuracy.
p0311 A73-35498
PITTS, G. C.
Effect of chronic centrifugation on body composition in the rat.
p0042 A73-13370
Effects of gravity on ontogeny in animals.
p0397 A73-42174
PLAKHATNIUK, V. I.
Changes in the cardiac rhythm during a hypoxic functional test
p0165 A73-23820
PLAKHUTA-PLAKUTINA, G. I.
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Morphological changes in the testes of dogs accompanying chronic and combined gamma irradiation
p0134 N73-16048
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101
PLANE, H. I.
Principles of the curtailment of sources of command signal in multifunctional bioelectric control systems
p0336 N73-26088
PLANCHARD, J. A.
A deterministic model of a well trained human operator performing compensatory tracking.
p0326 A73-36844

A deterministic model of a human performing compensatory tracking
[AD-746725] p0072 N73-13101

PLANEL, H.
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761

PLAS, F.
Does Carpentier's reconstructive valvuloplasty reopen the question of the inaptitude for flight of flight personnel with mitral prostheses
p0586 A73-12157
Hemodynamic effects of physical maneuvers /Valsalva, effort, respiration/ and of pharmacodynamic tests - Their clinical application
p0586 A73-12159
Detection of atherosclerosis in examinations of flight personnel
p0328 A73-36913

PLATH, P.
Signal perception in noise induced hearing loss.
p0352 A73-38182

PLATONOV, N. S.
Experimental-mathematical analysis of the effects of rotational accelerations on the vestibular apparatus
p0303 A73-34120

PLATONOVA, R. N.
Cytogenetic analysis of diploid and autotetraploid Crepis capillaris seeds following space travel on the 'Cosmos-368' artificial earth satellite
p0314 A73-36117

PLOMP, R.
Musical interval recognition with simultaneous tones
[IZF-1972-20] p0268 N73-23078

PLOTNIKOVA, V. P.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051

POBEGAILO, L. S.
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283

PODALL, H. E.
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993

PODDUBNAIA, L. T.
Effect of a 30-day stay in a medium with increased oxygen content on the discharge of some gaseous bioactivity products in rats
p0086 A73-17676
Influence of restricted motor activity on the resistance oi animals to acute action of carbon monoxide
p0280 A73-31519

PODDUBNAYA, L. T.
Certain peculiarities of the biological action of gaseous toxic substances which are discharged into the atmosphere from the urine and feces
p0182 N73-19097
Effect of a chemical preservative on the intensity of the discharge of certain gaseous toxic substances from stored urine
p0183 N73-19098
Problem to toxicity of exhaled air
p0183 N73-19103
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats
p0254 N73-22004
Effect of preliminary exposure to carbon monoxide on development of hypokinetic disorders in white rats
p0255 N73-22007
Effect of restriction of motor activity of animals on their tolerance to an acute exposure to carbon monoxide
p0264 N73-23043
Influence exerted on the animal body by continuous and discontinuous exposure to carbon monoxide
p0442 N73-33019

PODOLAK, E.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936

PODOPRIGORA, G. I.
The use of ultra-fine fiber filter cloth for removing bacterial contaminants from the air
[NASA-TT-F-14940] p0293 N73-24123

PODYMOV, V. K.
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101

POEPPEL, E.
Residual visual function after brain wounds involving the central visual pathways in man.
p0287 A73-33218

POHORECKY, L. A.
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100

POKORNY, J.
Color vision of normal observers.
p0079 A73-16481
Psychophysical estimates of optical density in human cones.
p0246 A73-30402

POKROVSKAYA, Y. I.
Certain indices of the material balance of man as a component in a closed ecological system
p0184 N73-19107

POKROVSKIY, A. M.
Prospects for the building and use of computer controlled manipulators
p0335 N73-26079
Synchronism and heterochronism of synkinesis in man
p0336 N73-26089
Robot-manipulator control algorithms
[JPRS-59717] p0375 N73-29051

POLAND, J. L.
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121

POLESE, A.
Role of the sympathetic nervous system in supporting cardiac function in essential arterial hypertension.
p0124 A73-21015

POLESHCHUK, A. T.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057

POLHEMUS, C.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133

POLIANSKII, V. B.
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719

POLIVODA, A.
Life support systems of spacecraft
[NASA-TT-F-14436] p0604 N73-10155

POLKOSHNIKOV, E. V.
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719

POLLACK, I.
Temporal and spatial features in detecting one- and two-dimensional constraints in complementary visual displays.
p0234 A73-28095
Detection of informational constraints related to multi-variate visual displays.
p0240 A73-29185

POLOZHENTSEV, S. D.
Microflora of a sealed cabin with human subjects in a 3-day experiment with reduced temperature and high relative humidity
p0088 A73-17697

Microflora in a closed cabin in a three-day experiment with human subjects at a reduced temperature and high relative humidity
p0065 N73-12098

POLYAN, Y. P.
Principles of the curtailment of sources of command signal in multifunctional bioelectric control systems
p0336 N73-26088

POLYANSKII, V. K.
Scattering of polarized light by plant cover elements
p0378 N73-29333

POMERANTSEVA, M. D.
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815

POMETOV, Y. D.
Variations in cardiac output and gas exchange at rest during hypokinesia
p0255 N73-22013

POMPEIANO, O.
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439

PONCE DE LEON, J.
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834

PONNAMPERUMA, C.
The prospect of life on Jupiter.
p0202 A73-26478

Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650

PONOMARENKO, V. A.
The problem of human efficiency in automated control systems
p0079 A73-16410

Some characteristics of pilot's performance under complicated flight conditions.
p0328 A73-36921

PONOMAREVA, I. D.
Informational significance of neuron pulse activity
p0579 A73-10653

PONOMAREVA, T. A.
Hemocoagulation and trombocyte state during hypokinesia after highland adaptation
p0208 A73-27713

State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high mountain conditions
p0217 N73-20107

PONTIUS, D. H.
Mass, volume, center of mass and mass moment of inertia of the head and neck of the human body [AD-762581]
p0377 N73-29065

POOL, J.
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946

POOL, S. L.
Medical technology advances from space research
p0075 N73-13851

Medical subject monitoring systems [NASA-CASE-MSC-14180-1]
p0259 N73-22045

POPE, J. H.
Miniature ingestible telemeter devices to measure deep body temperature [NASA-CASE-ARC-10583-1]
p0101 N73-14093

POPENCHENKO, V. V.
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167

POPENS, Y.
Fluorometric 11-hydroxy-corticosteroid assay in human blood plasma [NASA-TT-F-15092]
p0416 N73-30990

POPLAVSKAYA, L. I.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736

POPOV, A. A.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660

POPOV, I. G.
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079

Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089

POPOV, I. M.
Changes in gaseous metabolism and cardiac output per minute during local muscle work in man
p0164 A73-23809

POPOV, V.
Influence of the discontinuity between two media on the distribution of absorbed energy in a charged particle track
p0372 N73-29028

POPOV, V. A.
The problem of human efficiency in automated control systems
p0079 A73-16410

Work movement performance of the astronaut in flight.
p0207 A73-27645

POPOV, V. I.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182

POPOVA, L. A.
Changes in some behavioral reactions and in the bioelectric activity of the brain in cats during the development of sleep under polarization of individual brain structures
p0345 A73-37393

POPOVA, N. K.
Serotonin content in various parts of the brain during hibernation and awakening
p0278 A73-31390

The inhibiting action of 5-oxytryptophan on thermal regulation during the awakening from hibernation
p0343 A73-37252

POPPENDIEK, H. F.
Design considerations and applications of gradient layer calorimeters for use in biological heat production measurement.
p0395 A73-42054

A urine volume measurement system [NASA-CR-128726]
p0141 N73-16095

PORJESZ, B.
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225

PORTAL, H.
Cosmic radiation and research carried out on board the 001 prototype Concorde
p0116 A73-19211

PORTER, R. J.
Responsiveness at the onset of spike-wave bursts.
p0156 A73-22695

PORTER, S. H.
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071

PORTILLO, H.
Usefulness of vectorcardiography combined with His bundle recordings and cardiac pacing in evaluation of the preexcitation /Wolff-Parkinson-White/ syndrome.
p0587 A73-12445

PORTNOY, W. H.
Insulated electrocardiographic electrodes [NASA-CASE-MSC-14339-1]
p0232 N73-21151

PORTUGALOV, V. V.
Prolonged space flight and hypokinesia.
p0325 A73-36789

Course of the infectious process and functional activity of pulmonary macrophages in mice confined to an atmosphere with a high oxygen content
p0442 N73-33016

Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024

POSPELOV, D. A.
Ideation and automation [JPRS-60103]
p0440 N73-32019

POTAPOV, A. N.
Functional condition of skeletal muscles in rats under lasting movement constraints /up to 120 days/
p0279 A73-31504
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Functional state of the skeletal muscles of rats during prolonged restriction of mobility (up to 120 days)
p0262 N73-23028
Effect of prolonged hypokinesia on some indices of energy metabolism in the skeletal muscles and in some internal organs
p0262 N73-23029

POTAPOV, V. I.
Structural complexity and technical realization of formal neurons by means of magnetic current switches
p0431 A73-44901
Neuron-like elements in the activity of restoration organs
p0431 A73-44904

POTAPOVA, A. E.
Universal transistorized stimulator with external control
p0084 A73-16739

POTEMPA, K. W.
Relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance
[AD-759583] p0337 N73-26096

POTKIN, V. E.
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502

POTKIN, V. Y.
Effect of accelerations on reactivity of the gastro-intestinal tract to pharmacological agents
p0181 N73-19085
Investigation of some blood indices in white rats exposed to sixty day hypokinesia
p0262 N73-23026

POTOR, G.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154

POTTER, G. A.
AIAA employment workshops, Volume 1
[PB-209366] p0605 N73-10168

POTTS, A. M.
The assessment of visual function.
p0079 A73-16476
Electrophysiological measurements.
p0080 A73-16484

POTTS, J.
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687

POTTS, J. T.
Parathyroid hormone, calcitonin, and vitamin D
p0174 N73-18112

POTWIN, A. R.
The use of a battery of tracking tests in the quantitative evaluation of neurological function
p0599 N73-10118

POUGET, M. J.
On the causes of the changes of the second heart sound in left bundle branch block.
p0581 A73-11008

POULTON, E. C.
Efficiency in heat after a night without sleep
[OBS-8/72] p0421 N73-31024

POUNDER, S. C.
Auditory feedback and conditioning of the single motor unit
[AD-745107] p0605 N73-10165

POWELL, C. A., JR.
Factors influencing public acceptance of STOL noise
p0441 N73-32960

POWELL, M. R.
Gas phase separation following decompression in asymptomatic rats - Visual and ultrasound monitoring.
p0050 A73-14162

POWER, R. P.
Constancy and illusion of apparent direction of rotary motion in depth - Tests of a theory.
p0234 A73-28094

POWERS, E. M.
Microbiological testing of Skylab foods.
p0205 A73-27075

PRECHT, W.
Vestibular and cerebellar control of oculomotor functions.
p0316 A73-36438

PREMSELAAR, S. J.
Man-machine considerations in the development of a cockpit for an advanced tactical fighter
p0270 N73-23905

PREOBRAZHENSKII, N. N.
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576

PRESTON, P. S.
Radiation problems of supersonic flight - The operators' viewpoint.
p0080 A73-16624
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509
Sleep patterns in a lone global pilot.
p0307 A73-34745
Further sleep problems in airline pilots on world-wide schedules.
p0326 A73-36792
Sleep loss in air cabin crew.
p0355 A73-39109
Aspects of sleep regulation in airline pilots
p0226 N73-21107

PRESTON, K., JR.
Engineering Foundation Conference on Pattern Information Processing
[PB-214617/3] p0294 N73-24129

PRESTON, T. A.
Redintegrated somatotyping.
p0096 A73-18474

PRICE, T. J. G.
The significance of retinal pathology in ageing aircrew.
p0329 A73-36925

PRIEBE, L.
Telemetric measurement of local blood flow by heat conduction probes.
p0052 A73-14282

PRIGOGINE, I.
Biological order, structure and instabilities
p0281 A73-31824

PRINCE, J. E.
Cytologic aspect of RF radiation in the monkey, part 1
[AD-749583] p0108 N73-15128

PRINZ, W.
Two components and two stages in search performance - A case study in visual search.
p0435 A73-45339

PRIOR, R. E.
Study of electrocutaneous parameters relevant to dynamic tactual communication systems
p0230 N73-21135

PRIVES, M. G.
Effects of certain extreme stresses on the structure of the vascular system
[NASA-TT-F-15081] p0437 N73-32001

PROCHAZKA, J.
Physiological responses of rats to intermittent high-altitude stress - Effects of age.
p0169 A73-24564

PROCHAZKA, V. J.
Unusual properties of repetitive fasciculations.
p0359 A73-39761

PROCTOR, D. F.
Human perception of humidity under four controlled conditions.
p0089 A73-17864

PROFITT, C. L.
A simplified method for the in vitro calibration of electromagnetic flowmeters.
p0205 A73-27027

PROSIN, D. J.
Effect of a predictor display on carrier landing performance. Phase b: Display mechanization and preliminary evaluation
[AD-750294] p0103 N73-14102

PROWSE, K.
Effects of lung volume and disease on the lung nitrogen decay curve.
p0126 A73-21501
PSHEDETSKAIA, A. D.
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
PSHENNIKOVA, M. G.
Protein synthesis in the neurons and glial cells of the stellate ganglia of rats during the adaptation to the effects of high altitude hypoxia
p0345 A73-37396
PTACEK, C. H.
Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528
PTITSA, A. N.
Reaction of neurocytes of the paraventricular hypothalamic nucleus to unilateral thyroidectomy
p0382 A73-40283
PUERNER, N. J.
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
PUIG, J. A.
An evaluation of the training effectiveness of device 2F90, TA-4J operational flight trainer. Part 1: The B stage
[AD-750248] p0113 N73-15170
PUKITE, A. H.
Enzyme activity in terrestrial soil in relation to exploration of the Martian surface
[NASA-CR-128399] p0591 N73-10059
PULEC, J. L.
Specific acute losses of vestibular function in man following unilateral section of one or all components of the eighth cranal nerve
[NASA-CR-129672] p0070 N73-13084
PULLING, R. C.
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012
PUNSAR, S.
Angina pectoris and ECG abnormalities in relation to prognosis of coronary heart disease in population studies in Finland.
p0405 A73-42836
PURAKHAN, Y. N.
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073
PURAKHIN, IU. N.
Vertical posture control after Soyuz 6, 7 and 8 flights and 120-day hypokinesia
p0124 A73-20985
Human sensorimotor coordination following space flights.
p0397 A73-42170
PURAKHIN, Y. N.
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia
p0134 N73-16052
PURPURA, D. P.
Sleep and the maturing nervous system; Proceedings of the Symposium on the Maturation of Brain Mechanisms Related to Sleep Behavior, Boiling Springs, Pa., June 21-24, 1970.
p0050 A73-14255
PURSWELL, J. L.
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
PURVES, M. J.
The physiology of the cerebral circulation.
p0166 A73-23945
PUSHKIN, V. N.
Ideation and automation
[JPRS-60103] p0440 N73-32019
PUSTOVOITENKO, A. A.
Soviet cybernetics review (selected articles)
[AD-751145] p0178 N73-18143
PUTIATIN, E. P.
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Axiomatic formulation of a mathematical model for visual adaptation
p0579 A73-10655
Theoretical aspects of visual edge contrast in man
p0060 A73-15788
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
A mathematical model for controlled image contour sharpness enhancement
p0432 A73-44907
Theoretical prerequisites of image normalization. I
p0432 A73-44908
PUTNEY, R. T.
Conditioned alpha blocking re-examined with the measurement of individual wave amplitudes.
p0242 A73-29992
PUTSE, L. E.
Analysis of the spectra in a 'man-machine' system
p0159 A73-22971

Q

QAZI, S.
A time-division multiplexed telemetry system using delta-modulation.
p0052 A73-14279
QUARRY-PIGOTT, V.
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
QUARRY-PIGOTT, V. M.
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260
QUAY, W. B.
Circadian rhythms in catecholamines in organs of the golden hamster.
p0200 A73-26120
QUINN, M.
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533

R

RABIN, S. T.
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram.
p0306 A73-34533
RACHKULIK, V. I.
The brightness coefficient of the soil-vegetation system as a function of some parameters of the plant cover
p0378 N73-29334
RADCHENKO, A. N.
Loss of information during central summation of local postsynaptic potentials
p0249 A73-30825
RADKEVICH, L. A.
Change in the impulse activity of neurons in the respiratory center during electric stimulation of the vestibular nerve and dorsal roots in the spinal cord
p0442 N73-33017
RADOMSKI, M. W.
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503
RADOVIC, A.
Intracranial hemodynamic changes in pilots to tilting.
p0328 A73-36916
Comparative value of both hypoxic and positive pressure breathing tests for detection of premature beats.
p0331 A73-36944
RAEVA, S. N.
Features of the spontaneous and evoked neuronal activity of deep brain structures in man during voluntary movements
p0168 A73-24517
RAHBEK, K. S.
Water intoxication as a side effect of chlorpropamide therapy
[NASA-TT-F-14597] p0609 N73-11077
RAHIMTOOLA, S. H.
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507

RAHLMANN, D. F.
A monkey metabolism pod for space-flight weightlessness studies. p0313 A73-35963
Metabolic responses of monkeys to increased gravitational fields. p0314 A73-35982
RAIGORODSKAIA, L. IA.
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture p0382 A73-40280
RAITNER, A. E.
Assessment of left ventricular dimensions and function by echocardiography. p0289 A73-34038
RAKITIANSKII, D. F.
Origin of the external electric field detected near animals and men p0166 A73-23942
RAMACHANDRAN, V. S.
The role of colour perception and 'pattern' recognition in stereopsis. p0121 A73-20266
RAMAN, E. R.
Comparison of plethysmographic and electromagnetic flow measurements. p0427 A73-44215
RAMBAUT, P. C.
Method for analyses of cyclic physiological data that are nonstationary in time. p0049 A73-14120
Circadian rhythm asynchrony in man during hypokinesis. p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest. p0049 A73-14122
Food and nutrition studies for Apollo 16 [NASA-TM-X-58096] p0067 N73-12110
Dissociation of effects of prolonged confinement and bedrest in normal human subjects: Heart rate and body temperature p0175 N73-18113
Dissociation of effects of prolonged confinement and bed rest in normal human subjects; cortisol, insulin, thyroxine, and triiodothyronine p0175 N73-18114
RAMISHVILI, L. G.
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood p0157 A73-22856
RAMSEY, J. D.
Effects of cyclical temperature on vigilance performance [AD-748451] p0104 N73-14110
Self determined work-rest cycles in the heat p0271 N73-23987
RAMSEY, J. M.
Effects of single exposures of carbon monoxide on sensory and psychomotor response. p0383 A73-40409
RAMSEY, L. H.
The measurement of pulmonary extravascular water volume during exposure to simulated high altitude [AD-763355] p0418 N73-31004
RAND, P. W.
Responses to graded hypoxia at high and low 2,3-diphosphoglycerate concentrations. p0310 A73-35460
RANDALL, R. B.
The effect of helmet form on hearing: Free-field thresholds [AD-745121] p0260 N73-22053
Perception of symmetrically distributed weight on the head [AD-748412] p0261 N73-22056
RANKIN, J.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia. p0042 A73-13499
Time course of respiratory adaptation to high altitude [AD-755192] p0267 N73-23075
RANKIN, J. E.
A comparison of visual cuing methods in large displays during performance of a secondary task [AD-747688] p0068 N73-12120
RANKIN, R. L.
Development of system design information for carbon dioxide using an amine type sorber [NASA-CR-111849] p0420 N73-31018
RANSHAW, E.
Automatic microscopy for mitotic cell location. p0206 A73-27144
RAO, K. K.
The evolution of ferredoxins from primitive life to higher organisms. p0055 A73-14318
RAO, M. S. P.
Human factor aspects of aircraft noise. p0206 A73-27450
RAO, Y. S. M.
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives. p0196 A73-25333
RAPHAEL, M. J.
Q waves and coronary arteriography in cardiomyopathy. p0583 A73-11507
RAPOPORT, S.
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor P from reticulocytes in the respiratory chain p0588 A73-12510
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes. p0386 A73-41139
RAPP, R. M.
Nutrition systems for pressure suits. p0355 A73-39105
Food and nutrition studies for Apollo 16 [NASA-TM-X-58096] p0067 N73-12110
RASCH, P. J.
Maximal oxygen intake as a predictor of performance in running events [AD-746867] p0071 N73-13093
RASHID, A.
Mathematics of interaction between blood and electromagnetic fields. p0392 A73-41788
RASKATOVA, S. R.
The role of vestibulometry in medical evaluation of flight personnel p0165 A73-23821
RASQUIN, J. R.
Underwater space suit pressure control regulator [NASA-CASE-MFS-20332-2] p0299 N73-25125
RASSOLOVA, N. P.
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs p0279 A73-31505
Effect of prolonged hypokinesia on some indices of energy metabolism in the skeletal muscles and in some internal organs p0262 N73-23029
RASTRIGIN, L. A.
Application of the perceptron to the classification of objects according to random features p0119 A73-20047
RATISHVILI, G. G.
Effect of immersion on certain motor function indices p0180 N73-19081
RATLIFF, F.
Inhibitory interaction in the retina of Limulus. p0161 A73-23311
RAULT, A.
Transinformation and real time identification applied to the study of pilot workload p0085 A73-17195
RAUMBAUT, P. C.
Nutrition and musculoskeletal function: Skylab experiment series number M070 p0175 N73-18115
RAUNER, Y. L.
Radiation regime and the biometric indices of forest vegetation p0378 N73-29328
RAUTAHARJU, P. M.
Waveform vector analysis of orthogonal

electrocardiograms - Quantification and data reduction.
p0286 A73-33115

RAVEN, P. B.
Critical temperature of unacclimatized male Caucasians.
p0577 A73-10166

RAVENELLE, H. L.
Tactile Information Presentation (TIP)
[AD-761796] p0369 N73-27969

RAWSON, R. O.
Step-wise changes in thermoregulatory responses to slowly changing thermal stimuli.
p0239 A73-28535

RAY, A.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117

RAY, W. P.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011

RAYKHMAN, L. M.
Studies of conformational transitions of cytochrome c by the spin-label method
[NASA-TT-F-14623] p0065 N73-12099
The molecular organization of the active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042

RAYMAN, R. B.
In-flight loss of consciousness.
p0307 A73-34747
Sudden incapacitation in flight - 1 Jan. 1966-30 Nov. 1971.
p0356 A73-39112

RAYNAUD, G.
An instrument panel on an image tube in color
p0128 A73-21543

RAYNAUD, J.
Energy balance during moderate exercise at altitude.
p0277 A73-31343
Oxygen delivery and oxygen return to the lungs at onset of exercise in man.
p0361 A73-39788

RAZGOVOROV, B. L.
Chemical protection against mixed gamma-neutron radiation with various contributions of neutrons to the absorbed dose
p0212 N73-20068
Influence of shielding certain parts of the body on radiation sickness and survival of animals with total gamma-neutron irradiation
p0213 N73-20071
Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072
Influence of shielding certain parts of the body on the course of radiation sickness in dogs with total gamma irradiation
p0213 N73-20073
Effect of shielding the stomach on the frequency of chromosomal aberrations in the cells of the marrow of guinea pigs and rats with gamma-irradiation at doses of 50-200 r
p0213 N73-20074
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
Problem of relative biological effectiveness of fast neutrons
p0215 N73-20091

RAZSOLOV, N. A.
Statokinetic stability as a component general non-specific resistance.
p0327 A73-36904
Acceleration during double rotation in the Barany chair
p0254 N73-21995

RAZSUDOV, V. N.
The experimental treatment of poisonings with a new organophosphoric insecticide (methylnitrophos) with the use of cholinesterase reactivators
p0254 N73-21998

RAZUMEYEV, A. N.
Problems of space biology. Volume 17: Pathophysiological bases of aviation and space pharmacology
[NASA-TT-F-736] p0257 N73-22033

RAZUMOVSKII, M. I.
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520

REARDON, W. C.
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218

REARDON, J. A.
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034

REASON, J. T.
Simulator sickness in passive observers
[PPRC-1310] p0175 N73-18119
Factors contributing to motion sickness susceptibility: Adaptability and receptivity
p0225 N73-21095

REBELLE, J.
Development and adjustment of a multi-channel miniaturized FM/AM telemetering system adapted to the primates.
p0053 A73-14284

REBUCK, A. S.
Correlation of ventilatory responses to hypoxia and hypercapnia.
p0359 A73-39776
Rebreathing equilibration of CO2 during exercise.
p0434 A73-45068

RECORD, H. L.
The design and evaluation of an artificial ear
[AD-746691] p0073 N73-13112

REDDAN, W. G.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
Time course of respiratory adaptation to high altitude
[AD-755192] p0267 N73-23075

REDDICK, J. M.
Design modification of electrophoretic equipment
p0231 N73-21140

REDDING, G. M.
Visual adaptation to tilt and displacement - Same or different processes.
p0388 A73-41188

REDDY, Y. S.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686

REED, A.
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report summary
[NASA-CR-128857] p0190 N73-19158
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Final report
[NASA-CR-128858] p0190 N73-19159

REED, D. A.
Helicopter crew/passenger vibration sensitivity -
p0591 N73-10019

REED, J. P.
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215

REED, S.
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462

REEVES, T. J.
Isometric effects on treadmill exercise response in healthy young men.
p0165 A73-23842

REGAN, D.
Theoretical models of the generation of steady-state evoked potentials, their relation to neuroanatomy and their relevance to certain clinical problems.
p0236 A73-28354
Evoked potentials to changes in the chromatic contrast and luminance contrast of checkerboard stimulus patterns.
p0236 A73-28355

Brightness contrast and evoked potentials.
p0275 A73-31017
Disparity detectors in human depth perception - Evidence for directional selectivity.
p0383 A73-40413
An evoked potential correlate of colour - Evoked potential findings and single-cell speculations.
p0407 A73-42961

REHDER, K.
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505

REHME, H.
Changes in the diurnal variation of simulated pilot activity after time shift due to air travel through several time zones
[DLR-FB-73-25] p0298 N73-25122

REICH, J. G.
Effects of experimental conditions on parameter estimated when using the Hill model
p0153 A73-21872

REICH, M. B.
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648

REID, B.
An annotated bibliography of United States Air Force applied physical anthropology
[AD-762287] p0371 N73-27978

REID, D. H.
Biomedical responses of parachutists to 110 through 175 knot /IAS/ through-the-air tow by aircraft.
p0285 A73-32675
Human physiological responses to high speed aerial tow.
p0330 A73-36939

REID, R. C.
Adsorption of spacecraft contaminants on Bosch carbon.
[ASME PAPER 73-ENAS-15] p0349 A73-37972

REIF, J. S.
Insensitivity of the alveolar septum to local hypoxia.
p0575 A73-10134

REIFENRATH, E.
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637

REINAUER, H.
Synthesis rate of phospholipids and cytochromes b5 and P-450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064

REINHARDT, H. B.
The effects of muscular exercise on urinary excretions of adrenal hormones in the normal man
[NASA-TT-F-15046] p0374 N73-29043

REINHOLZ, E.
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761

REIMS, D. A.
Evaluation of heat loss from Navy divers' wet suit
[AD-747276] p0613 N73-11103
Damage control suit system
[AD-762428] p0370 N73-27976

REISS, K. H.
Electroradiography - Some remarks on its technique and future.
p0427 A73-44214

REKHTMAN, M. B.
Features of supraspinal control of the reflex paths of the spinal cord during walking
p0163 A73-23677

REMIZOV, I. N.
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812

REMMERS, J. E.
Control of the duration of expiration.
p0391 A73-41635

REMOLE, A.
Extended border enhancement during intermittent illumination - Binocular effects.
p0308 A73-34842

RENHAM, R. E.
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report summary
[NASA-CR-128857] p0190 N73-19158
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Final report
[NASA-CR-128858] p0190 N73-19159

RENNIE, I. D. B.
Phase IV volume of the single-breath nitrogen washout curve on exposure to altitude.
p0360 A73-39783

RENSHAW, A.
Apollo 14 and Apollo 16 heavy-particle dosimetry experiments.
p0343 A73-37150

RENSON, F.-J.
Ribes Nigrum anthocyanosides in ophthalmology
p0330 A73-36935

RENTSCHLER, I.
Spatial summation in color-receptive pathways.
p0120 A73-20254

REPA, B. S.
The use of a battery of tracking tests in the quantitative evaluation of neurological function
p0599 N73-10118
The use of a tracking test battery in the quantitative evaluation of neurological function
[NASA-CR-132275] p0340 N73-27069

REPLOGLE, C. R.
Application of manual control theory to the study of biological stress
p0602 N73-10138
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154

RESCH, G. E.
Hypoxia, an adjunct in helium-cold hypothermia - Sparing effect on hepatic and cardiac metabolites.
p0120 A73-20169

RESHOD'KO, L. V.
Investigation of the nature of biological rhythm sensors by means of automatic networks
p0393 A73-41865
Study of the nature of the active tonus with the aid of a discrete Wiener-medium analog
p0407 A73-42973

RESNICK, O.
The role of biogenic amines in sleep.
p0051 A73-14260

RETZLAFF, E.
Comparative investigations regarding the phenomenon of force potentiation in the case of the heart muscle of cold-blooded and warm-blooded animals
p0249 A73-30669

REUTER, H.
Calcium movements and excitation-contraction coupling in cardiac cells.
p0198 A73-25601

REVENTOS, J.
Effect of monochromatic light on blood constants
[NASA-TT-F-14941] p0297 N73-25111

REVZIN, A. M.
Transient blindness due to the combined effects of mevinphos and atropine
[FAA-AM-73-4] p0338 N73-27055
Subtle changes in brain functions produced by single doses of mevinphos (phosdrin)
[FAA-AM-73-3] p0338 N73-27056

REYNOLDS, J. A.
A multiplex cathode-ray-tube display with digital readout for a body plethysmograph.
p0402 A73-42666

REYNOLDS, M. A.
Lunar sample quarantine procedures - Interaction with non-quarantine experiments.
p0313 A73-35978

REYNOLDS, M. C.
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696

REYNOLDS, O. E.
Developments in the analysis of planetary quarantine requirements.
p0395 A73-42159

REYNOLDS, R. E.
Factors affecting the detection and recognition of colored targets
[AD-746297] p0610 N73-11083

REYNOLDS, W. J.
Digital computer studies of respiratory control. p0123 A73-20577
Transient ventilatory response to hypoxia with and without controlled alveolar PCO2. p0359 A73-39777
RHEINLANDER, T. W.
Training effectiveness evaluation of naval training devices. Part 1: A study of the effectiveness of a carrier air traffic control center training device [AD-751556] p0141 N73-16101
RHEINWALD, V.
Studies on the influence of Pervitin on the incidence of gas bubbles in blood after decompression [DLR-FB-72-66] p0175 N73-18117
RHO, J. H.
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples. p0202 A73-26481
RIABININ, A. D.
Certain aspects of the bionic analysis and control of dynamic systems p0580 A73-10658
Electrooptical model of the first retina layers of a visual analysor p0045 A73-13657
Amplitude discriminator with variable discrimination levels p0168 A73-24516
RIABININ, V. A.
Amplitude discriminator with variable discrimination levels p0168 A73-24516
RIABININA, N. A.
Neuronal activity of the sensomotor and visual cortex in rabbits during development of a summation focus in the reticular formation p0428 A73-44550
RIABOVA, E. Z.
Antiradial properties of DNA and of its denaturation products p0098 A73-18875
RICARDO, J.
Symmetry of the visual evoked potential in normal subjects. p0385 A73-41012
RICCI, B.
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry. p0356 A73-39113
RICE, C. G.
Impulse noise damage risk criteria. p0310 A73-35327
Human response to transportation noise and vibration. p0310 A73-35328
RICHALET, J.
Transinformation and real time identification applied to the study of pilot workload p0085 A73-17195
RICHARD, J. C.
Favorable effect of flight on pilots exhibiting degenerative arteriopathy of the lower limbs p0585 A73-12151
RICHARDS, D. E.
The toxicity of pyrolysis products from a chlorotrifluoroethylene-ethylene copolymer (Halar resin) [AD-751436] p0138 N73-16080
RICHARDS, W.
Brightness contrast and evoked potentials. p0275 A73-31017
Factors affecting depth perception [AD-759261] p0375 N73-29050
RICHARDSON, B.
Effects of hyperoxia on heme biosynthesis [AD-756836] p0294 N73-24125
RICHARDSON, P. C.
Bandwidth reduction of sleep information, Volume 2 [AD-740946] p0605 N73-10167
RICHARDSON, T.
Modification and updating of the bioelectric DS2C amplifier for a PET input. p0159 A73-22936
RICHOLD, P. H. C. V.
Megarad plastic film dosimeter. p0427 A73-44212
RICKETTS, P. T.
Multiple hormonal responses to graded exercise in relation to physical training. p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training. p0048 A73-14117
RIDDLE, H. C.
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man. p0054 A73-14300
RIDLEY, H. M.
Stimulus specificity in the human visual system. p0407 A73-42960
RIECHMANN, S. W.
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results. p0304 A73-34149
RIECKERT, H.
Telemetry of venous blood pressure at rest and at muscle activity during running. p0053 A73-14290
RIEDESEL, M. L.
Memory and hibernation in Citellus lateralis. p0078 A73-16324
RIEGER, P.
Optomotor integration in the colliculus superior of the cat. p0316 A73-36443
RIGGS, L. A.
Curvature as a feature of pattern vision. p0389 A73-41303
RIGHINI, G. U.
Automatic analysis and classification of electroencephalograms p0309 A73-34966
RINEHART, D.
Space suit [NASA-CASE-MSC-12609-1] p0439 N73-32012
RINGLAND, E. F.
Motion cue effects on pilot tracking p0602 N73-10141
RINGWALDA, B. H. M.
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber. p0251 A73-30910
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m. p0251 A73-30911
RIO, M.
Atmospheric regeneration in closed chambers by potassium superoxide p0332 A73-36951
RIPLEY, K. L.
Compact digital coding of electrocardiographic data. p0097 A73-18815
RISAVI, A.
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes. p0330 A73-36934
RISIUS, J.
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus. p0397 A73-42171
RITCHIE, M. L.
Noise effects on the critical tracking performance of the human operator. p0575 A73-10107
Some interactions among driver, vehicle, and roadway variables in normal driving p0601 N73-10131
RITMAN, E. L.
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle. p0348 A73-37798
Studies of the effects of gravitational and inertial forces on cardiovascular and respiratory dynamics [NASA-CR-133212] p0298 N73-25119
RITTENHOUSE, D.
Conceptual design study for a teleoperator visual

system, phase 1
[NASA-CR-124059] p0150 N73-17117
RITTER, V. V.
Procedure for preparing an oxygen-nitrogen gas mixture for respiration in a pressure chamber
p0240 A73-29409
RITZMANN, S. E.
Effects of the space flight environment on man's immune system. II - Lymphocyte counts and reactivity.
p0589 A73-12565
RIVES, J. M.
Ground safety panel presentation.
p0357 A73-39212
RIZZON, P.
Familial syndrome of midsystolic click and late systolic murmur.
p0199 A73-25697
ROARK, A. L.
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
ROBE, T. R.
Seat reaction direction in an animal centrifuge.
p0116 A73-19478
ROBERTS, A. J.
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125
ROBERTS, E.
Coordination between excitation and inhibition - Development of the GABA system.
p0051 A73-14258
ROBERTS, J.
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
ROBERTS, T. D. M.
Inversion illusion in the so-called zero-gravity conditions of parabolic flight.
p0247 A73-30511
ROBERTSON, A. B.
The toxicity of pyrolysis products from a chlorotrifluoroetyhylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080
ROBERTSON, D. G.
Effect of hypoxia on free fatty acid metabolism during exercise.
p0080 A73-16609
ROBERTSON, W. G.
Temperature
p0104 N73-15094
ROBINSON, D. A.
The behavior of eye movement motoneurons in the alert monkey.
p0315 A73-36433
ROBINSON, D. E.
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
ROCHELLE, R. H.
Erythrocyte volume in acidified venous blood from exercising limbs.
p0436 A73-45557
ROCKWELL, R. J., JR.
Investigation of ocular hazard from lasers in human subjects
[AD-747058] p0071 N73-13099
RODARTE, J. R.
Effect of acute exposure to CO2 on lung mechanics in normal man.
p0200 A73-26216
Influence of expiratory flow limitation on the pattern of lung emptying in normal man.
p0400 A73-42422
RODBARD, S.
Competition between collateral vessels.
p0408 A73-43105
RODDUBNAYA, L. T.
Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions
p0063 N73-12077
RODRICK, P. T.
Vibration effects on pilot tracking performance using a rigid control stick
[AD-745193] p0605 N73-10164
ROEBELEN, G. J., JR.
Ice pack heat sink subsystem - Phase 1, Volume 1
[NASA-CR-114624-VOL-1] p0419 N73-31006
ROEHL, D.
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699
ROEHLICH, F.
Development of system design information for carbon dioxide using an amine type sorber
[NASA-CR-111849] p0420 N73-31018
ROESSLER, R.
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073
ROETHIG, H. J.
Synthesis rate of phospholipids and cytochromes b5 and P-450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064
ROFFWARG, H. P.
Spontaneous middle ear muscle activity in man - A rapid eye movement sleep phenomenon.
p0587 A73-12423
ROGATINA, L. N.
Effect of a chemical preservative on the intensity of the discharge of certain gaseous toxic substances from stored urine
p0183 N73-19098
Preservation of urine in a system for regeneration of water from it
p0183 N73-19099
Study of the technology of decontamination of water which has been regenerated from the liquid products of human vital functions
p0183 N73-19105
Study of a method of conservation of urine relative to spaceflight conditions
p0184 N73-19112
ROGERS, A. K.
Long-term observations in patients with angina and normal coronary arteriograms.
p0097 A73-18871
ROGERS, C. A., JR.
Forced guidance and distribution of practice in sequential information processing.
p0201 A73-26319
ROGERS, D. B.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154
ROGERS, G. G.
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622
ROGERS, R. L.
Effects of sodium pentobarbital on rats in normocapnic and chronically hypercapnic conditions
[AD-751234] p0187 N73-19142
ROGGE, K.-E.
Electroencephalogram alterations after delayed acoustic responses to speech
p0056 A73-14473
ROHLES, F. H., JR.
Drive and performance modification following multiple /light-light/ shifts in the photoperiod.
p0154 A73-22528
Thermal comfort - New directions and standards.
p0325 A73-36785
ROHLFING, D. L.
Molecular evolution: Prebiological and biological.
p0089 A73-17926
ROHMERT, W.
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
Telemetric transmission of ergonomical and time study data to describe work load of radar controllers.
p0055 A73-14308
Ergonomic assessment of information work
p0198 A73-25649

Heart rate variability and work-load measurement.
p0250 A73-30879
ROHNER, J. J.
The role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072
ROITBUB, B. A.
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
ROKOTOVA, N. A.
Voluntary activation of individual motor units in man
p0168 A73-24519
ROLETT, E. L.
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259
ROLFE, J. M.
Flight deck environment and pilot workload - Biological measures of workload.
p0347 A73-37732
ROMAN, C.
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
ROMANKO, A. N.
Modification of a ballisto-oscillograph for extremities
p0157 A73-22865
ROMANOV, V. A.
Procedures for polarocochleography and for pressure measurement in the inner ear perilymph in acute experiments on animals
p0193 A73-25043
ROMANOVA, I. A.
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089
ROMANOVA, L. K.
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
ROMERO-SIERRA, C.
Radiofrequency fields - A new ecological factor.
p0392 A73-41787
ROMHILT, D. W.
Unreliability of conventional electrocardiographic monitoring for arrhythmia detection in coronary care units.
p0209 A73-27891
RONCHI, L.
Intra-day variations in visual responsiveness.
p0357 A73-39479
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
RONKIN, M. A.
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Use of multichannel rheography in physiological investigations on a centrifuge
p0065 N73-12094
ROSATI, R. A.
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
ROSCOE, S. N.
Computer-assisted instruction in pilot training and certification.
p0082 A73-16724
Simulator motion as a factor in flight-director display evaluation
[AD-749370] p0075 N73-13126
Assessment of pilotage error in airborne area navigation procedures
[AD-754214] p0223 N73-20150
ROSEN, F.
Active plant growth at freezing temperatures.
p0203 A73-26486
ROSENBAUM, M. B.
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
The differential electrocardiographic manifestations of hemiblocks, bilateral bundle branch block, and trifascicular blocks.
p0319 A73-36523
The clinical causes and mechanisms of intraventricular conduction disturbances.
p0319 A73-36524
ROSENBLATT, L. S.
Method for analyses of cyclic physiological data that are nonstationary in time.
p0049 A73-14120
ROSENBROCK, F.
Multidimensional coding for telemetric transmission of work load factors in ergonomics research.
p0055 A73-14307
ROSENFALCK, P.
Rise time of the spike potential in fast and slowly contracting muscle of man.
p0168 A73-24500
ROSENHAMER, G.
Gravitational stress and exercise.
p0313 A73-35980
ROSENTHAL, M.
Application of human engineering principles and techniques in the design of electronic production equipment.
p0246 A73-30497
ROSENTHAL, S.
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
ROSHCHINA, N. A.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005
ROSITANO, S. A.
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Visual examination apparatus
[NASA-CASE-ARC-10329-1] p0335 N73-26072
ROSLINSKI, L. M.
Guides for short-term exposures of the public to air pollutants
[AD-751438] p0139 N73-16084
Basis for establishing guides for short term exposure of the public to air pollutants
[AD-751437] p0140 N73-16088
ROSS, J. K.
Distribution of the long-wave radiation fluxes and the radiation balance in plant cover
p0378 N73-29322
ROSS, J., JR.
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
Nature and significance of alterations in myocardial compliance.
p0404 A73-42689
ROSS, T.
Objective techniques for psychological assessment
[NASA-CR-128945] p0295 N73-24136
ROSS, W.
Estimation of the passing of four consecutive hours.
p0086 A73-17524
ROSS, W. S. D.
Regional lung volumes with positive pressure inflation in erect humans.
p0094 A73-18334
ROSSING, R. G.
Information yield of the Annual Medical Examination for Flying.
p0356 A73-39110
ROSTORFER, H. H.
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
ROTA, P.
Study on some air force operational activities in Italy, with reference to thermal conditions and

their effects on acceleration tolerance and psychomotor performance
p0266 N73-23068

ROTH, M. G.
Space food systems - Mercury through Apollo.
p0050 A73-14168

ROTHBAUER, G.
Investigation of the binary selectable control gain in the case of a positioning problem
p0284 A73-32583

ROTHENBERG, D.
Early childhood education: Status trends, and issues related to electronic delivery
[NASA-CR-133028] p0300 N73-25131

ROTHMAN, H. B.
The contribution of the external auditory meatus to human auditory sensitivity
[AD-751664] p0177 N73-18132

ROTHSCHILD, H. C.
The effect of high intensity noise of varying frequencies on neuroendocrine response in the rat
p0371 N73-29018

ROTHSTEIN, J.
Pattern recognition by retina-like devices
[PB-211238] p0102 N73-14096

ROTSTSOLATTI, D.
The impulse activity of thalamic cells in various phases of sleep and wakefulness
p0257 N73-22030

ROUBINET, J.
Fractures of the spine during flight /concerning two cases encountered during pumping/
p0586 A73-12154

ROUFS, J. A. J.
Dynamic properties of vision. III - Twin flashes, single flashes and flickerfusion.
p0120 A73-20253

ROUIF, G.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540

ROUIF, NH.
Numerical analysis of spontaneous electric activity of the brain - Study of the statistical properties of the power density spectra
p0586 A73-12160

ROUS, J.
Telemetrical measurements during sport performance on sportsmen with cardiac arrhytmias.
p0054 A73-14294

ROUSE, W. B.
A model of the human in a cognitive prediction task.
p0399 A73-42223
Supervisory sampling and control: Sources of suboptimality in a prediction task
p0598 N73-10114

ROUSSEAU, J.
Space shuttle environmental and thermal control/life support system study
[NASA-CR-134009] p0415 N73-30091

ROUSSEL, B.
Sleep and cerebral temperature in the rat during the chronic exposure to a hot environment
[NASA-TT-F-15082] p0417 N73-30994

ROUSSINOV, K. S.
Influence of different motor regimes on the convulsive reactivity of the central nervous system.
p0085 A73-17178

ROUZ, R.
Initial results of a psychophysiological study of certified parachutists
p0328 A73-36917

ROVNER, L. M.
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
Effect of accelerations on thiamine-S-35 distribution in the bodies of white mice
p0133 N73-16044

ROWE, K.
Investigation of ocular hazard from lasers in human subjects
[AD-747058] p0071 N73-13099

ROWELL, L. B.
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657

ROWLAND, G. E.
Support of advanced development objective 43-13, human factors technology
[AD-744984] p0613 N73-11104

ROWLAND, T. J.
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408

ROWLEY, D. B.
Microbiological testing of Skylab foods.
p0205 A73-27075

ROZANOV, IU. M.
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135

ROZANTSEV, E. G.
Studies of conformational transitions of cytochrome c by the spin-label method
[NASA-TT-F-14623] p0065 N73-12099

ROZELLE, L. T.
NS-1 membranes - Potentially effective new membranes for treatment of washwater in space cabins.
[ASME PAPER 73-ENAS-19] p0350 A73-37975

ROZENSHTEIN, G. S.
The expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057

ROZOV, E. B.
The use of oxygen in the decompression and remedial recompression of divers
[DRIC-TRANS-3095] p0334 N73-26069

RUBIN, G.
Applications of space teleoperator technology to the problems of the handicapped
[NASA-CR-133357] p0367 N73-27949

RUBIN, M. L.
Visual acuity.
p0079 A73-16477

RUCKER, R. S.
Effect of sonic boom on fish
[FAA-RD-73-29] p0219 N73-20121

RUCKNER, E. A., JR.
Parameters affecting underwater vision
[AD-743756] p0595 N73-10092

RUDDOCK, K. H.
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis.
p0585 A73-12077
The influence of wavelength on visual adaptation to spatially periodic stimuli.
p0200 A73-26199
Non-linearity of visual signals in relation to shape-sensitive adaptation responses.
p0346 A73-37418

RUDENKO, L. P.
Conditional reflex switching
p0248 A73-30567

RUDER, J. M.
Development of design information for molecular-sieve type regenerative CO2-removal systems
[NASA-CR-2277] p0366 N73-27948

RUDEV, A.
Spaceflight safety
[JPRS-58781] p0232 N73-21149

RUDNYI, N. M.
Effect of certain flight factors on crew efficiency
p0383 A73-40350

RUDY, L. W., JR.
Distribution of systemic blood flow during cardiopulmonary bypass.
p0158 A73-22930

RUECKER, M. R.
A contaminant monitor for submarine atmospheres.
[ASME PAPER 73-ENAS-9] p0349 A73-37970

RUETERJANS, H.
NMR spectroscopic and calorimetric investigation of ribonuclease A and T1
[BMWG-FBWT-72-7] p0137 N73-16071
Calorimetric investigation of enzymes. Thermodynamic parameter determination of the interaction between ribonuclease T1 inhibitors

and substrates
[PMVG-PBWT-72-12] p0137 N73-16073
Nuclear resonance investigation of enzymes. PMR spectra of ribonuclease inhibitor complexes
[PMVG-PBWT-72-13] p0137 N73-16074
RUETHER, H.
Preliminary results of the action of cosmic heavy ions on development of eggs of Artemia salina.
p0315 A73-36129
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
RUFF, S.
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274
RUHMEL, D. B.
Handling qualities and realistic training.
p0083 A73-16733
RUIZ, A. V.
Ventilatory control in the Hereford calf.
p0360 A73-39782
RUKAVISHNIKOV, A. M.
Acceleration during double rotation in the Barany chair
p0254 N73-21995
RUMMEL, J. A.
Physiological response to exercise after space flight - Apollo 7 to Apollo 11.
p0195 A73-25326
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
Metabolic analyzer
[NASA-CASE-MFS-21415-1] p0112 N73-15156
RUMYANTSEVA, V. M.
Problem of the survival of microorganisms under conditions simulating those on Mars
p0185 N73-19116
RUNG, G. R.
Effects of high mountain climbing on the human organism
p0124 A73-20991
Characteristics of the effect of high mountain alpinism exercises on the human body
p0135 N73-16058
RUPERT, A.
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
RUPP, T. D.
Computer program for activity determinations in the USAFSAM whole-body counter
[AD-745578] p0593 N73-10078
RUSHKEVICH, N. A.
Formation of conditioned responses to symbolic stimulations in healthy individuals of different age
p0276 A73-31158
RUSTAN, P. L., JR.
Evaluation of effects of the microwave oven /915 and 2450 MHz/ and radar /2810 and 3050 MHz/ electromagnetic radiation on noncompetitive cardiac pacemakers.
p0363 A73-39824
RUSU, M.
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
RUSZCZYNSKA, M. B.
Measurements of the ultraweak bioluminescence phenomena as a new biotelemetric method.
p0054 A73-14304
RUTENBERG, H. L.
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690
RUTENFRANZ, J.
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
RUTISHAUSER, W.
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
RUTMAN, H. M.
Bioelectric correlates of individual differences
p0393 A73-41888
Bioelectric correlates of operative adjustment
p0394 A73-41891
RUUGE, E. K.
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
RYACHEV, V. P.
Scattering of polarized light by plant cover elements
p0378 N73-29333
RYAN-PLATT, R.
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932
RYAN, A. P.
Masking as an indicator of neural fatigue: A preliminary study
[AD-752975] p0300 N73-25129
RYAN, L. E.
An evaluation of the training effectiveness of device 2F90, TA-4J operational flight trainer. Part 1: The B stage
[AD-750248] p0113 N73-15170
RYBIN, M. A.
Problem of the survival of microorganisms under conditions simulating those on Mars
p0185 N73-19116
RYCHKOVA, M. A.
The photosynthesis of submerged aquatic plants as a function of the intensity of penetrating radiation
p0378 N73-29327
RYCHKOVA, M. P.
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and n-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
RYL'NIKOV, IU. P.
Effect of excessive glucose administration on the lipid level, glycolysis rates, and oxygen uptake in the tissues of the liver, heart, cerebrum and aorta
p0193 A73-25042
RYZHOV, N. I.
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays
p0263 N73-23041

S

SAAR, E.
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
A comparison of three methods of acclimatization to dry heat.
p0158 A73-22932
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
SABIN, C. M.
A urine volume measurement system
[NASA-CR-128726] p0141 N73-16095
SABINE, J. C.
Apparent paradoxical patterns of anaerobic glycolysis and hexokinase activity in the red blood cells of acutely bled rats, with evidence that the responses were in part hormone-dependent.
p0196 A73-25568
SABISTON, B. H.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056

SABISTON, D. C., JR.
Quantitative radionuclide angiocardiography for determination of chamber to chamber cardiac transit times.
p0057 A73-14767
SACKNER, M. A.
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786
SACKS, H. N.
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867
SADEKOV, M. KH.
Mediator systems and respiratory function during an acute lethal loss of blood
p0117 A73-19645
SADLER, C.
The specific resistance of blood at body temperature.
p0402 A73-42670
SAENGER, E. L.
Terminal pointer hand controller and other recent teleoperator controller concepts - Technology summary and application to earth orbital missions.
p0344 A73-37326
SAGAL, A. A.
Experimental substantiation of the optimal method for scaling the duration of acoustic stimuli
p0401 A73-42654
SAGAN, C.
The search for indigenous lunar organic matter.
p0095 A73-18428
SAGINBAEVA, SH. K.
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
SAGONE, I.
Microelectrophoresis of human erythrocytes: Importance and uses in obstectrics and gynecology [NASA-TT-F-14587] p0069 N73-13077
SAITO, H.
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989
SAIZEN, N.
A new method for simultaneous measurement of total respiratory resistance and compliance.
p0084 A73-16799
SAKAMOTO, T.
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
SAKAMOTO, Y.
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
SAKMANN, B.
Light adaptation of the late receptor potential in the cat rptina.
p0236 A73-28352
SAKSONOV, P. P.
Characteristics of the narcotic action of hexenal in combination with aminothyol-series radioprotective drugs in irradiated animals
p0278 A73-31391
Problems of space biology. Volume 14: Radiobiological aspects of the reactivity of the organism during space flights [NASA-TT-F-721] p0211 N73-20054
Certain aspects of the practical utilization of medicinal substances under flight conditions
p0212 N73-20060
Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061
Certain characteristics of the action of sympathomimetic amines on the reflex functions of the central nervous system of irradiated and sympathectomized animals
p0212 N73-20063
Chemical means of prophylaxis of radiation sickness
p0212 N73-20065
Antiradiation effectiveness of cystamine under various conditions of gamma irradiation
p0212 N73-20067
Influence of gamma radiation on the elimination of the toxic effect of cystamine
p0213 N73-20070
Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
Rate of recovery of radioresistance with the combined application of ionizing radiation and dynamic flight factors on the organism
p0214 N73-20080
Influence of cystamine combined with sympathomimetic amines on reparative processes following the action of radiation and overloads
p0214 N73-20081
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
SALAZKIN, V. N.
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
SALIBA, G.
Objectives of training in relation to accident prevention.
p0326 A73-36850
SALISBURY, F. B.
Active plant growth at freezing temperatures.
p0203 A73-26486
SALTIN, B.
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Body temperatures during negative work exercise.
p0048 A73-14112
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508
Oxygen uptake, muscle high-energy phosphates, and lactate in exercise under acute hypoxic conditions in man.
p0385 A73-41131
Oxygen uptake during maximal work at lowered and raised ambient air pressures.
p0386 A73-41132
SALTONSTALL, C. W., JR.
Reverse osmosis for wash water recovery in space vehicles.
[ASME PAPER 73-ENAS-12] p0349 A73-37971
SALTZMAN, H. A.
Differences between inspired and expired minute volumes of nitrogen in man.
p0434 A73-45069
SALVAGNIAC, A.
Fractures of the spine during flight /concerning two cases encountered during pumping/
p0586 A73-12154
SALVI, G.
Performance decrement, under prolonged testing, across the visual field.
p0392 A73-41730
SALZARULO, P.
A vecto-oculographic approach to fast sleep eye movements in man.
p0242 A73-29994
SAMARIN, G. I.
Asymmetry of otolith responses in fish
p0279 A73-31507
Asymmetry of otolithic reactions in fish
p0262 N73-23031
SAMAUN, MR.
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649
SAMET, M. G.
Computer-controlled differential review-time

payoff as a training aid.
p0083 A73-16725
Information seeking with multiple sources of conflicting and unreliable information.
p0431 A73-44778
SAMOBUKOV, I. A.
Prolonged control of cardiac bioelectrical activity in man in ground experiments and during spaceflight
p0088 A73-17694
Prolonged monitoring of human cardiac bioelectric activity during ground experiments and in space flight
p0065 N73-12095
SAMSON, P.
Problems related to high-performance flight in the Arctic regions
p0332 A73-36953
SANCHEZ, J.
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
SANDERS, M. S.
Technology for man 72; Proceedings of the Sixteenth Annual Meeting, Los Angeles, Calif., October 17-19, 1972.
p0081 A73-16701
SANDERS, R.
Torsional elasticity of human skin in vivo.
p0391 A73-41625
SANDLER, H.
A multichannel electromagnetic flowmeter telemetry system.
p0052 A73-14283
Single and multichannel implanted telemetry systems.
p0054 A73-14302
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380
The application of aerospace technology to patient monitoring.
p0285 A73-32804
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
SANDODZE, V. IA.
Genesis mechanism of slow cortical after-discharges during brain injuring by radiation
p0078 A73-16331
SANFORD, A. J.
A periodic basis for perception and action.
p0287 A73-33159
SANFORD, J. P., III
Effect of low humidity on human performance [AD-756835]
p0296 N73-24142
SANKOVA, E. I.
Effect of light deprivation on the metabolic reaction development in retinal ganglion cells
p0163 A73-23681
SANO, T.
Depolarization phase of the spatial velocity electrocardiogram in normal and ventricular overloading.
p0171 A73-24900
SANSBURY, R. V.
Normal fixation of eccentric targets.
p0275 A73-31018
SANTOS, J.
On the electronic simulation of acceleratory nystagmus.
p0403 A73-42683
SANUI, H.
Cation exchange binding of rubidium and cesium by rat liver cell microsomes.
p0588 A73-12549
SAPELKINA, I. M.
Effect of prolonged hypokinesia on certain energy transfer characteristics in skeletal muscles and some internal organs
p0279 A73-31505
Effect of prolonged hypokinesia on some indices of energy metabolism in the skeletal muscles and in some internal organs
p0262 N73-23029
SAPLINSKAS, I. S.
Functional condition changes of biceps brachii in man under the effect of fatiguing physical stress
p0117 A73-19643
SAPRU, H. N.
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162
SARACHEK, N. S.
A new method to measure non-uniformity in the intact heart.
p0059 A73-15645
SARGSIAN, V. A.
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
SARKISIAN, D. S.
Electrophysiological study of the topographic organization of Deiters' lateral vestibular nucleus
p0168 A73-24515
SARKISOV, I. IU.
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals
p0209 A73-27718
Calculation of a coriolis acceleration acting on semicircular canal receptors of man in rotating systems
p0280 A73-31518
Adequate vestibular stimulants on earth and in space
p0303 A73-34122
Analysis of vestibular effects in experiments on swings
p0305 A73-34235
SARKISOV, I. Y.
Equivalence of the effect of coriolis acceleration on receptors of the semicircular canals at some angular acceleration
p0218 N73-20112
Computation of the Coriolis acceleration acting on receptors of human semicircular canals in rotating systems
p0263 N73-23042
Analysis of vestibular effects in experiments in swigs
p0373 N73-29033
SARKISOV, K. G.
Influence of histamine on cutaneous capillary circulation and on the oxygen tension of subcutaneous cellular tissue in various age periods
p0163 A73-23676
SARRAILUE, S. R.
The protective performance of crash helmets [ARL/SM-NOTE-390]
p0420 N73-31014
SARUTA, T.
Effects of an hyperoxic hypobaric environment on renin-aldosterone in normal man.
p0127 A73-21503
SASAKI, K.
Examination of responses evoked in the sensory cortex by thalamic stimulation.
p0164 A73-23772
SASHKOV, V. S.
Antiradiation effectiveness of cystamine under various conditions of gamma irradiation
p0212 N73-20067
SASS, D. J.
Roentgenographic study of relative heart motion during vibration in water-immersed cats.
p0289 A73-34039
SASSI, G.
The effect of O2 breathing on maximal aerobic power.
p0583 A73-11504
SATO, C.
Portable electro-phonocardiograph using magnetic tape recorder equipped with patient's voice print.
p0196 A73-25475
SATO, T.
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
SAUBERT, C. W.
Diet, exercise, and glycogen changes in human muscle fibers.
p0576 A73-10160
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508

SAULGOZIS, IU. ZH.
Experimental determination of shear moduli in a compact bone tissue
p0045 A73-13742
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996
SAUNDERS, R. M.
Eigenvectors of the sensitivity variations across the human central fovea.
p0407 A73-42957
SAUTER, R. J.
Foot pedal operated fluid type exercising device [NASA-CASE-MSC-11561-1] p0439 N73-32014
SAUVAGE, A.
Quantitative influence of CO2 inhalation on thermal sweating in man.
p0195 A73-25331
Model of evaporation responses to heat load increases
p0352 A73-38150
SAUVAGE, D.
A study of evoked slow activities in man which follow a voluntary movement and articulated speech
p0359 A73-39759
SAVATEEV, N. V.
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
SAVCHENKO, N. IA.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182
SAVCHUK, V. S.
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812
SAVENKO, I. A.
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
SAVICH, A. A.
Maturational changes in the bioelectrical activity of the brain in sleeping children
p0257 N73-22032
SAVIER, C.-H.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505
SAVILOV, A. A.
Influence of an oxygen and carbon dioxide rich gas mixture on the human orthostatic stability
p0124 A73-20988
Effect of a gas mixture with an increased oxygen and carbon dioxide content on man's orthostatic tolerance
p0135 N73-16055
Negative pressure on the lower half of the human body and the volume of circulating plasma
p0444 N73-33036
SAVINA, E. A.
Morphological changes in the testicles of dogs exposed to chronic and combined gamma-radiation
p0123 A73-20981
Morphological changes in the liver of dogs induced by chronic gamma irradiation
p0208 A73-27707
Morphological changes in kidneys during exposure to variously oriented accelerations at a level of 4 g for many hours
p0304 A73-34226
SAVINA, V. P.
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Gas chromatographic investigations of volatile products of human metabolism accompanying reduced food intake and starvation
p0064 N73-12091
SAVINA, Y. A.
Morphological changes in the testes of dogs accompanying chronic and combined gamma irradiation
p0134 N73-16048
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101
Morphological changes in the kidneys during multihour exposure to 4-g accelerations imparted in different directions
p0372 N73-29023
SAVITS'KII, V. A.
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
SAVOIE, R. E.
Bezold-Bruecke effect and visual nonlinearity.
p0424 A73-43342
SAVUN, O. I.
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
SAWIN, C. F.
Use of the single-breath method of estimating cardiac output during exercise-stress testing.
p0325 A73-36788
SAYERS, B. M.
Analysis of heart rate variability.
p0250 A73-30878
SCARPERI, M.
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Input and output in the system of thermoregulation during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074
SCARPERI, S.
Thermoregulatory behavior of man during rest and exercise.
p0162 A73-23572
Input and output in the system of thermoregulation during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074
SCHACTER, J.
The National Aeronautics and Space Administration-U.S. Public Health Service Health Evaluation and Enhancement Program - Summary of results.
p0043 A73-13545
SCHACTHER, J.
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091
SCHAEFER, H. J.
Comparative evaluation of exposure distributions for air travelers and radiation workers
[AD-743482] p0594 N73-10083
Dosimetric characteristics of HZE particles in space
[NASA-CR-131467] p0230 N73-21132
SCHAEFER, K. E.
The Bohr effect in chronic hypercapnia
[AD-763394] p0418 N73-31005
SCHAEFER, K.-P.
Neuronal elements of the orienting response - Microrecordings and stimulation experiments in rabbits.
p0316 A73-36444
SCHAFFER, G.
The glutamic acid metabolism of the brain and its modification through hyperbaric oxygenation
p0368 N73-27960
SCHALKOWSKY, S.
Safety margins in the implementation of planetary quarantine requirements.
p0395 A73-42161
SCHALL, D. W.
Automation of the problem oriented medical record
p0147 N73-17087
SCHASTNII, A. I.
A physiological study of the complex behavior of anthropoids /chimpanzee/
p0426 A73-43928
SCHATTE, C. L.
Nonthermal metabolic response of rats to He-O2, N2-O2, and Ar-O2 at 1 atm.
p0399 A73-42201
SCHATZ, A.
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Wing anomalies of the flour beetle tribolium confusum caused by 0-G simulation

p0367 N73-27952
Elementary physics and application of O-G simulation according to H. J. Muller
p0368 N73-27961

SCHEDTLER, C.-M.
Glycogen content in the rabbit retina in relation to blood circulation.
p0392 A73-41732

SCHEEL, E. G.
Pressure gradient measurements in the bodies of animals with air blast injuries
[DLR-FB-71-72] p0113 N73-15164

SCHEEL, L. D.
The toxicity of pyrolysis products from a chlorotrifluoroethylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080

SCHEETZ, H. A.
Perception of symmetrically distributed weight on the head
[AD-748412] p0261 N73-22056

SCHEIBEL, A. B.
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257

SCHEIBEL, M. E.
Maturing neuronal subsystems - The dendrites of spinal motoneurons.
p0051 A73-14257

SCHEID, P.
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous lung models.
p0391 A73-41639

SCHEINOK, P.
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648

SCHELLER, H.
The dependence of the negative afterimage on the duration of the stimulus and the stimulus intensity
p0204 A73-26550

SCHERAGA, H. A.
Refinement of X ray data on proteins. II - Adjustment of structure of specified geometry to relieve atomic overlaps.
p0308 A73-34893

SCHERLIS, L.
Evaluation, diagnosis and treatment of common structural complications of acute myocardial infarction.
p0321 A73-36548

SCHEUER, J.
Effects of physical training on cardiac actomyosin adenosine triphosphatase activity.
p0078 A73-16157

SCHEURMANN, W.
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761

SCHEVING, L. E.
Circadian variations in presumably healthy men under conditions of peace-time army reserve unit training.
p0357 A73-39482

SCHEWE, T.
Biochemical processes during the maturation of erythrocytes - Further results with regard to the action site of the respiratory inhibitor P from reticulocytes in the respiratory chain
p0588 A73-12510

SCHIFFMAN, H.
A two-stage model of brightness.
p0585 A73-12078

SCHILLER, P. H.
Some functional characteristics of the superior colliculus of the Rhesus monkey.
p0316 A73-36442

SCHIMMERLING, W.
Cellular effects of heavy charged particles.
p0398 A73-42183

SCHINDLER, A. M.
On the physical basis of a theory of human thermoregulation.
[ASME PAPER 73-AUT-J] p0240 A73-29414

SCHINKMANN, H.
Radiation sterilization with a Van de Graaff accelerator
[NASA-TT-F-14821] p0219 N73-20120

SCHLANT, R. C.
Advances in electrocardiography; Proceedings of the Symposium, Emory University, Atlanta, Ga., May 10-13, 1971.
p0318 A73-36516

SCHLOSS, H. S.
Computation of solutions to the inverse problem of electrocardiography.
p0582 A73-11465

SCHLUETER, G.
Electron-microscopic investigations regarding the protective effect of hypothermia on cell organelles in the case of whole-body X-irradiation
p0047 A73-13824

SCHMID-SCHOENBEIN, H.
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199

SCHMIDT, L.
The question of water and electrolyte levels at high temperatures
[NASA-TT-F-13915] p0592 N73-10066

SCHMIDT, M. J.
Human receptive field characteristics - Probe analysis of stabilized images.
p0120 A73-20252

SCHMIDT, R. R.
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503

SCHMIT, V.
Visual and verbal coding in the interhemispheric transfer of information.
p0435 A73-45337

SCHMITT, O. H.
Human perception of moderate strength low frequency magnetic fields.
p0392 A73-41789

SCHNEIDER, H. J.
Apollo Lunar Module environmental control system - Mission performance and experience.
[ASME PAPER 73-ENAS-28] p0351 A73-37983
Applications of remote sensing in public health.
p0363 A73-39866

SCHNEIDER, T.
The direct endangering of the living space (a proposed set of quantitative concepts)
[NRC-TT-1636] p0376 N73-29057

SCHOENE, H.
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502

SCHOENE, K.
Antidotes for alkyl phosphate poisoning: Structure-effect relations in vivo and in vitro
[BMVG-FBWT-72-8] p0137 N73-16072

SCHOHAN, B.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143

SCHOLES, V. E.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482

SCHOONARD, J. W.
Field of view and target uncertainty in visual search and inspection.
p0194 A73-25181
Studies of visual inspection.
p0423 A73-43212

SCHOONOVER, W. E., JR.
Ride quality research activities at NASA Langley Research Center
p0591 N73-10024

SCHOPF, J. W.
Late Precambrian microfossils - A new stromatolitic biota from Boorthanna, South Australia.
p0241 A73-29723

SCHOPPER, E.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.

p0398 A73-42179

SCHORI, T. H.
A comparison of visual, auditory, and cutaneous tracking displays when divided attention is required to a cross-adaptive loading task.
p0283 A73-32395

SCHORNICK, J. L.
SMEAT atmosphere trace contaminants.
[ASME PAPER 73-ENAS-45] p0351 A73-37992

SCHOTT, J. U.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179

SCHOTT, O.
Signal processing in medical technology
p0424 A73-43317

SCHOTT, R.
Experimental investigation of the structure of joint movements in the range of motions of the arms and of the entire body, giving attention to a presentation in a man-related basic system
p0047 A73-13812

SCHREIBER, G.
Skin protection against high toxic phosphoric acid esters
[BMVG-FBWT-72-15] p0138 N73-16076

SCHREINER, H. R.
Predictive modeling of altitude decompression sickness in humans
[NASA-CR-114550] p0136 N73-16066

SCHRIER, R. W.
Effect of actinomycin D on aldosterone-mediated changes in electrolyte excretion.
p0156 A73-22650

SCHROEDER, D. J.
Alcohol and disorientation related responses. 6: Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about the yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989

SCHROTER, R. C.
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129

SCHROY, C. B.
Cellular effects of heavy charged particles.
p0398 A73-42183

SCHUELLER, C. F.
ASRDI oxygen technology survey. Volume 2: Cleaning requirements, procedures, and verification techniques
[NASA-SP-3072] p0111 N73-15155

SCHUETTE, W. H.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797

SCHUHMANN, P. J.
Origin of terrestrial polypeptides - A theory based on data from discharge-tube experiments.
p0357 A73-39484

SCHULTE-WINTROP, H.
Tranquilizers and aviation
p0228 N73-21123

SCHULTZ, D. L.
Velocity distribution in aortic flow.
p0408 A73-43104

SCHULTZ, J.
Myeloperoxidase, the peroxidase of a primitive cell - Its reaction with Fe and H2O2.
p0090 A73-17944
Investigation of the biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068

SCHUMSKY, D. A.
General and specific factors in the intersensory transfer of form.
p0043 A73-13525

SCHUSTER, B.
Experiences with physical conditioning programs in middle-aged men
p0143 N73-17051
The coronary patient in industry
p0146 N73-17084

SCHUSTER, F.
Influence of simulated weightlessness on the mutational rate of Tribolium confusum.
p0314 A73-35984
Wing anomalies of the flour beetle tribolium confusum caused by 0-G simulation
p0367 N73-27952

SCHUSTERMAN, R. J.
Mammal underwater acoustics
[AD-746520] p0073 N73-13113

SCHUTZ, H. K.
Link system of the human torso
[AD-754924] p0223 N73-20151

SCHWAGER, M.
Method allowing biological and biochemical studies of vacuum-exposed bacteria.
p0357 A73-39483

SCHWAN, H. P.
Biological hazards from exposure to ELF electrical fields and potentials
[AD-743480] p0595 N73-10093

SCHWANK, G. D.
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525

SCHWARTZ, A.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686

SCHWARTZ, A. W.
Theory and experiment in exobiology. Volume 2.
p0055 A73-14315
The sources of phosphorus on the primitive earth - An inquiry.
p0090 A73-17933

SCHWARTZ, L.
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469

SCHWARTZKROIN, P. A.
Effects of round window stimulation on unit discharges in the visual cortex and superior colliculus.
p0356 A73-39146

SCHWARZ, R. A.
Medical Information Management System (MIMS): A generalized interactive information system
[NASA-TM-X-66076] p0604 N73-10156

SCHWEIGER, H. G.
Circadian rhythms - Subcellular and biochemical aspects.
p0089 A73-17824

SCOTT, B.
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976

SCOTT, E. L.
Proceedings of the 6th Berkeley Symposium on Mathematical Statisitics and Probability. Volume 5: Darwinian, neo-Darwinian, and non-Darwinian evolution
[NASA-CR-131508] p0229 N73-21131

SCOTT, W. L.
Tactile sensing means for prosthetic limbs
[NASA-CASE-MFS-16570-1] p0439 N73-32013

SCRIBNER, W. G.
Research program on beryllium oxide analysis and toxicity
[AD-754936] p0220 N73-20131

SCRIMSHIRE, D. A.
Computer simulation of gas exchange in human lungs.
p0278 A73-31348

SEADER, J. D.
Analysis of volatile combustion products and a study of their toxicological effects.
p0587 A73-12429

SEALE, S. J.
Some psychometrics in relation to target acquisition
p0191 N73-19974

SEARS, W. J.
Aeromedical evaluation of the phased-dilution concept for oxygen breathing systems
p0266 N73-23065

SEBESTIK, V.
Polyvinylpyrrolidone used as cryoprotective substance for erythrocyte preservation
[NASA-TT-F-14590] p0069 N73-13076

SECHENOV, I. M.
Theoretical aspects of motivational stimulation
p0448 N73-33062

SEDOV, A. V.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106

SEED, W. A.
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity.
p0085 A73-17274

SEEMAN, J. S.
Study to validate the Non-Interference Performance Assessment (NIPA) technique
[NASA-CR-128865] p0190 N73-19164

SEGAL, B. L.
Atherosclerosis and coronary heart disease.
p0320 A73-36531

SEGEL, N.
Effects of tilting on pulmonary capillary blood flow in normal man.
p0361 A73-39786

SEIBEL, B.
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149

SEIDEN, G. E.
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375

SEIDOV, B. D.
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400

SEIDOV, K. G.
Binocular color resolution capability of the eyes as a function of the characteristics of vision during anisometropia
p0275 A73-30999

SEITZ, G.
Optical properties of the compound eye.
p0161 A73-23310

SELBIE, D. B.
Surface contaminants.
p0096 A73-18547

SELF, H. C.
Very low altitude detection of small stationary targets at very slow speeds: A simulation study using strip photography
[AD-754928] p0222 N73-20146

SELIVERSTOV, A.
Parachute oxygen apparatus
[AD-756554] p0296 N73-24141

SELMAN, J. R.
Research on oxygen recovery systems for use in space capsules
[NASA-CR-114573] p0300 N73-25130

SELYE, H.
Stress and aerospace medicine /The Harry G. Armstrong Lecture/.
p0155 A73-22536

SEMBRONICH, G. L.
Myosin ATPase and fiber composition from trained and untrained rat skeletal muscle.
p0077 A73-16155
Effect of training on enzyme activity and fiber composition of human skeletal muscle.
p0127 A73-21508

SEMENIUTIN, I. P.
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670

SEMENOV, N. O.
IR-spectroscopic investigation of the thermal stability of albumin at different levels of its ionization
p0170 A73-24685

SEMIOKHINA, A. F.
Changes of the free radical concentration in the cerebral cortex depending on the functional state of the cerebrum
p0582 A73-11082

SEMMLOW, J.
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395

SENATOR, F. E.
Advanced trash management system.
[ASME PAPER 73-ENAS-31] p0351 A73-37986

SENCHURO, I. N.
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867

SENINA, N. IA.
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106

SEPPEN, M. A.
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397

SERAFETINIDES, E. A.
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.
p0247 A73-30517

SERBAN, I.
The effect of low X-ray doses on the central nervous system
p0427 A73-44179

SERBINENKO, N. V.
Estimate of integrative cerebral activity using an orientation response example
p0401 A73-42651
The orientative-investigative reaction as a factor changing the configuration of evoked potentials on repeated flashes
p0449 N73-33070

SERDIUCHENKO, V. IA.
Investigation of the edge vision contrast phenomenon using the null method
p0579 A73-10654
Theoretical aspects of visual edge contrast in man
p0060 A73-15788
A mathematical model for controlled image contour sharpness enhancement
p0432 A73-44907

SERDIUK, A. N.
Influence of a low-intensity ultrahigh-frequency electromagnetic field on the bioelectrical activity of the brain in rabbits
p0154 A73-22367

SEREBROVSKAIA, K. B.
Modelling of structure and functional unity on coacervate systems.
p0091 A73-17950

SEREDENKO, N. N.
Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939

SERGEIEV, A. A.
A bibliography of Soviet literature on aviation, alpine and space biology and medicine
[JPRS-53329] p0375 N73-29047

SERGIENKO, A. V.
Effect of protein quality in the diet of rats on their tolerance to severe hypoxia
p0279 A73-31511

SERGIENKO, V. B.
Energy cost of muscle work in a state of fatique
p0080 A73-16697

SERGIYENKO, A. V.
Effect of protein quality in the ration of rats on their tolerance of acute hypoxia
p0263 N73-23035

SERKOV, F. N.
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940

SERVAIS, J. C.
Telemetry and ergometry associated to the measure of oxygen consumption during sports events.
p0053 A73-14285

SESSLER, A. D.
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505

SGIBNEV, A. K.
Effect of certain gaseous toxic substances on the resistance of animals to acute hypoxic hypoxia

p0182 N73-19096
Problem of studying the toxicity of indole
p0183 N73-19102
SHABANOV-KUSHNARENKO, IU. P.
Axiomatic formulation of a mathematical model for visual adaptation
p0579 A73-10655
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Introduction of a metric into the visual field
p0432 A73-44906
Dynamics of the balance preservation system of man
p0432 A73-44909
SHABATURA, M. N.
The energetic metabolism and some reactions of the cardiovascular system during multichannel electrical stimulation and voluntary stressing of muscles
p0429 A73-44670
SHABETAI, R.
Nature of the conduction disturbance in selective coronary arteriography and left heart catheterization.
p0587 A73-12443
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
SHACKLETT, D. E.
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
SHAFFER, T. H., III
Control analysis and design of demand regulated liquids breathing systems
p0252 N73-21976
SHAH, P. M.
A comparison and analysis of head sizes of Navy aircrew to the standard anthropometric data.
p0284 A73-32656
SHAIDOROVA, V. V.
Effectiveness of the application of tightly bonded sulfo-cation exchange resins in water recycling by the sorption method
p0086 A73-17677
SHAKHOVA, V. I.
Influence of physical stress on the state of human higher nervous activity under conditions of underwater labor
p0429 A73-44672
SHAL'NOVA, G. A.
Auto-antibodies of an irradiated organism
p0060 A73-15711
SHAMIS, A. L.
An approach to the construction of a formal model of behavior
p0447 N73-33055
SHAMIS, A. Y.
The personnel's vitamin balance at Vostok station
p0379 N73-29357
Diet at Vostok station
p0379 N73-29358
SHAMPINE, J. C.
Evaluation of heat loss from Navy divers' wet suit
[AD-747276] p0613 N73-11103
SHANMUGAM, T. M.
Asana and breathing
p0322 A73-36573
SHANNON, R. H.
Toward the development of a criterion for fleet effectiveness in the P-4 fighter community.
p0082 A73-16723
The isolation of critical elements within selected maneuvers during primary flight training.
p0083 A73-16727
Identifying pilot error potential in the F-4 aircraft.
p0083 A73-16731
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
A new approach to criterion development in the replacement air group
[AD-748195] p0104 N73-14111
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community
[AD-755184] p0269 N73-23087
The use of confidential instructor ratings for the prediction of success in naval undergraduate pilot training
[AD-757693] p0296 N73-24146
SHAPIRO, J.
Blue-green algae - Why they become dominant.
p0096 A73-18577
SHAPIRO, S.
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288
SHAPKOV, IU. T.
Voluntary activation of individual motor units in man
p0168 A73-24519
SHAPOVALOV, A. I.
Evolution of the neuron systems of suprasegmental motor control /Review/
p0118 A73-20001
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578
Investigation of the distribution of synaptic inputs on an analog model of the motoneurons
p0349 A73-37942
SHARAEV, G. A.
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels
p0435 A73-45248
SHARMA, S. C.
The structure of particle tracks.
p0196 A73-25423
SHARP, R.
Ultradian rhythms in human telemetered gross motor activity.
p0355 A73-39102
SHARROCK, N.
Practical exercise test for physical fitness and cardiac performance.
p0043 A73-13540
SHASHKOV, V. S.
Water and salt metabolism in hypokinesia-subjected animals
p0207 A73-27704
Chemical means of prophylaxis of radiation sickness
p0212 N73-20065
Pharmacological properties of substances for medicinal prophylaxis of radiation damage
p0212 N73-20066
Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072
Influence of pharmacochemical substances on the reactivity of the organism to the combined action of gamma radiation and transverse overloads
p0215 N73-20086
Water mineral metabolism in animals subjected to restricted mobility
p0216 N73-20098
SHAVRIN, P. I.
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
SHAYWITZ, B. A.
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys
[AD-751232] p0140 N73-16092
SHCHERBACH, T. A.
Investigation of complex and hypercomplex receptive fields of visual cortex of the cat as spatial frequency filters.
p0407 A73-42958
SHCHITKO, V. N.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
SHCHUKIN, P. I.
Correlational inter-relationships between the neuroendocrinal system and the genotype in the formation of protective reactions of the organism
p0281 A73-31875
SHEEHAN, J. F.
Apollo Lunar Module environmental control system - Mission performance and experience.

[ASME PAPER 73-ENAS-28] p0351 A73-37983
SHEFFIELD, L. T.
Isometric effects on treadmill exercise response in healthy young men. p0165 A73-23842
SHELBURNE, J. C.
Clinical manifestations of acute myocardial infarction. p0321 A73-36543
SHENK, S. W.
Applications of space teleoperator technology to the problems of the handicapped
[NASA-CR-133357] p0367 N73-27949
SHEPARD, L. F.
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012
SHEPELEV, V. N.
The functional state of the visual and vestibular analyzers of those who work with small doses of ionizing emissions
[AD-750499] p0109 N73-15132
SHEPELEV, Y. I.
Biological life support systems
[NASA-TT-F-15005] p0339 N73-27067
SHEPHERD, J. T.
Circulatory reflexes from mechanoreceptors in the cardio-aortic area. p0384 A73-40637
SHEPHERD, K. P.
Human response to transportation noise and vibration. p0310 A73-35328
SHEPHERD, R. E.
Effect of training on enzyme activity and fiber composition of human skeletal muscle. p0127 A73-21508
SHEPOVALNIKOV, A. N.
Mechanisms of sleep
[NASA-TT-F-740] p0257 N73-22023
Maturational changes in the bioelectrical activity of the brain in sleeping children p0257 N73-22032
SHERF, L.
QRS abnormalities in AV block - Variations and their significance. p0319 A73-36521
SHERIDAN, T. B.
Supervisory sampling and control: Sources of suboptimality in a prediction task p0598 N73-10114
SHERMAN, D. D.
Visual-motor coordination characteristics of parachute jumpers p0088 A73-17750
SHERMAN, I. A.
A criterion for oxygen supply optimality in tissues and the capillary circulation rate p0047 A73-13821
SHERR, A. E.
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
SHEVCHENKO, A. I.
Certain aspects of the bionic analysis and control of dynamic systems p0580 A73-10658
SHEVRIGIN, B. V.
Aspects of air flow to the olfactory region of the human nose p0276 A73-31163
SHIBATA, S.
Automatic electrocardiogram interpretation system. p0056 A73-14660
SHICHI, H.
Modified rhodopsin in the pigment epithelium. p0121 A73-20263
SHIELDS, N. L., JR.
Evaluation of human operator visual performance capability for teleoperator missions. p0344 A73-37327
SHIGEZUMI, M.
Technical improvements in radiotelemetering of the electrocardiogram. p0053 A73-14293
SHIGIN, A. G.
A diagnostic program - Problems of predicting myocardial infarction on a digital computer p0354 A73-38998
SHIKHODYROV, V. V.
Auto-antibodies of an irradiated organism p0060 A73-15711
SHIKINA, M. I.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products p0124 A73-20984
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system p0306 A73-34240
Advanced methods of recovery for space life support systems. p0347 A73-37711
Radiation oxidation of water impurities in moisture-containing products of man's vital functions p0134 N73-16051
Investigation of decontaminating properties of sorbents used in the life support system of spaceships p0374 N73-29038
SHILLING, C. W.
Dysbaric osteonecrosis: An annotated bibliography with preliminary analyses
[AD-747258] p0071 N73-13100
SHILLINGER, G. L., JR.
Responses of blind fish to gravitational changes as achieved in parabolic flight p0226 N73-21101
SHILOV, V. M.
Study of intestinal Lactobacillus species composition during a long stay of humans in a closed space p0306 A73-34239
Study of the species composition of enteric bacilli during prolonged confinement of man in a closed space p0373 N73-29037
SHIMENO, H.
Metabolism of drugs. 77: In vitro metabolism of antipyrine
[NASA-TT-F-14868] p0218 N73-20116
SHIMKEVICH, L. L.
Effect of hyperoxic medium on cells, tissues and organs of experimental animals p0182 N73-19091
Action of hyperoxia on connective tissue p0182 N73-19092
Problems of Space Biology. Volume 15: Functional morphology during extremal actions
[NASA-TT-F-738] p0185 N73-19126
SHIMKOVICH, M. V.
Adaptation to high altitude hypoxia as a factor preventing development of myocardial ischemic necrosis. p0115 A73-19151
SHINAR, D.
Multi-task time-sharing requirements
[AD-755363] p0269 N73-23088
SHINKAREVSKAIA, I. P.
Functional changes in the systemic and regional /intracranial/ circulation during low value accelerations p0208 A73-27714
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels p0305 A73-34236
SHINKAREVSKAYA, I. P.
Functional changes in systemic and regional (intracranial) circulation accompanying low accelerations p0217 N73-20108
Some characteristics of hemodynamics in an orthostatic test for persons with different vestibular-autonomic tolerance p0373 N73-29034
SHIPOV, A. A.
Equivalence of the action of Coriolis accelerations to that of certain angular accelerations in their effects on the receptors of semicircular canals p0209 A73-27718
Adequate vestibular stimulants on earth and in space p0303 A73-34122
Analysis of vestibular effects in experiments on swings p0305 A73-34235

Equivalence of the effect of coriolis acceleration on receptors of the semicircular canals at some angular acceleration
p0218 N73-20112
Analysis of vestibular effects in experiments in swings
p0373 N73-29033
SHIPPY, D. J.
Seat reaction direction in an animal centrifuge.
p0116 A73-19478
SHIRAZI, M.
A proposed distributed parameter model for studying the effects of acceleration forces upon the arterial system
[AD-756530] p0294 N73-24128
SHIRNOV, K. A.
Decatron indicator for a micromanipulator controlled by a stepping motor
p0250 A73-30850
SHITZER, A.
Thermal protective garment using independent regional control of coolant temperature.
p0117 A73-19481
Comparative study of patches for liquid cooled garments.
p0345 A73-37404
A model of heat transfer in a biological tissue perfused by blood of arbitrary temperature.
p0424 A73-43292
SHKHVATSABAIA, I. K.
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348
SHKVAR, A. M.
Certain aspects of the bionic analysis and control of dynamic systems
p0580 A73-10658
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657
SHLAYEN, P. V.
Ergonomic prerequisites for artistic designing
p0413 N73-30080
Evaluating the efficiency of man-machine systems
p0414 N73-30087
SHLYKOV, V. IU.
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943
SHMELEVA, A. M.
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
Conditions of ascertaining and conditioning man's capacity to distinguish the composition of a breathing atmosphere
p0182 N73-19090
SHNEYDER, A. Y.
Principles of the curtailment of sources of command signal in multifunctional bioelectric control systems
p0336 N73-26088
SHNEYEROV, A. B.
Method for automatic processing of the indices of an operator's gas exchange during work in a trainer using a ""DNEPR'' electronic computer
p0444 N73-33035
SHOENBERGER, R. W.
Tracking performance during whole body vibration with side mounted and center mounted control sticks
[AD-761798] p0370 N73-27971
SHOHAM, H.
Sensitivity of the brain to repeated exposures of hyperbaric oxygen.
p0195 A73-25328
SHORT, R. A.
Investigation of biowaste resistojets for space station application
[NASA-CR-112159] p0112 N73-15161
SHORT, R. V.
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509
SHOSTAK, V. I.
Apparatus for measurement of vision acuity restoration time after brief macula lutea exposures to light
p0425 A73-43791
SHPERL, L. V.
Plotting of poststimulus histograms by means of the 'Neuron-1' analyzer
p0165 A73-23811
SHPICHINETSKII, B. IA.
Ways of enhancing the efficiency of physical exercise
p0280 A73-31515
SHRAMKOV, I. G.
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems
p0336 N73-26090
SHTRAUKH, G. A.
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
SHUBIN, H.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
SHUBIN, V. I.
Effect of antioxidants on the blood deoxygenation rate in animals exposed to altered atmospheres
p0207 A73-27702
Effect of antioxidants on the rate of deoxygenation of blood in animals exposed to a modified atmosphere
p0216 N73-20096
SHUBROOKS, S. J., JR.
Changes in cardiac rhythm during sustained high levels of positive /+Gz/ acceleration.
[AD-754146] p0050 A73-14157
Effect of the Valsalva maneuver on tolerance to +Gz acceleration.
p0241 A73-29754
Positive-pressure breathing as a protective technique during +Gz acceleration.
p0361 A73-39793
The use of physiological protective maneuvers in high acceleration environments
p0189 N73-19156
SHUDEL', M. S.
Application of the method of polarizational ultraviolet fluorescence microscopy to study giant muscle fibers Balanus rostratus Hock
p0124 A73-21135
SHUL'GA, V. A.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
SHUL'GIN, I. V.
Psychophysical studies of visual image normalization mechanisms in man
p0061 A73-15791
Introduction of a metric into the visual field
p0432 A73-44906
SHUL'GINA, G. I.
Diminution of uncertainty in the firing of hippocampal units in response to a stimulus
p0362 A73-39803
SHUL'ZHENKO, E. B.
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
SHULEYKINA, K. V.
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
SHULZHENKO, Y. B.
Human cardiovascular system reactions to sign variable transverse accelerations
p0064 N73-12088
SHUMILINA, A. I.
Comparative analysis of the electrical activity of the cortex and of cerebral subcortical formations in the process of the alteration of conditioned reactions
p0205 A73-27104

Late visual cortical region reactions during the convergence of light stimulation and electrocutaneous stimulation
p0239 A73-29073
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anaesthetized rabbits
p0449 N73-33069

SHUMILINA, S. P.
Determination of the size distribution function of erythrocytes by the spectral transparency method
p0436 A73-45521

SHURANOVA, ZH. P.
Circulation of nervous impulses in the cerebral cortex
p0248 A73-30569

SHURLEY, J. T.
Sensory versus perceptual isolation - A comparison of their electrophysiological effects.
p0247 A73-30517

SHUROVA, L. F.
Protein and nucleic acid contents in animal tissues under hypokinesia
p0279 A73-31503
Content of protein and nucleic acids in the tissues of animals during hypokinesia
p0262 N73-23027

SHUTA, H. G.
Age-related characteristics of pulmonary edema development during acute hypoxic hypoxia
p0166 A73-23939

SHUTKO, A. M.
Investigation of the exchange between the blood and the intraocular fluid with the aid of radioactive phosphorus
p0168 A73-24520

SHVAIKOVA, L. V.
Changes in gaseous metabolism and cardiac output per minute during local muscle work in man
p0164 A73-23809

SHVARTS, M. L.
Biomedical problems of space flights: Index of domestic and foreign literature
p0062 A73-16034
Medical-biological problems of spaceflight: An index to the Russian and foreign literature
[NASA-TT-F-14662] p0265 N73-23053

SHVARTZ, E.
Acclimatization to severe dry heat by brief exposures to humid heat.
p0045 A73-13700
A comparison of three methods of acclimatization to dry heat.
p0158 A73-22932
Heat acclimatization while wearing vapor-barrier clothing.
p0307 A73-34742
Tolerance to heat following cold stress.
p0325 A73-36784

SHVETSOVA, E. I.
Chemical thermoregulation after an 'accelerated' adaptation to the cold
p0430 A73-44721

SHVYRKOV, V. B.
The role of analyzers of conditional and unconditional stimuli in the functional system of the behavioral conditioned-reflex action
p0206 A73-27105

SICKEL, W.
Retinal metabolism in dark and light.
p0162 A73-23319
Electrical and metabolic manifestations of receptor and higher-order neuron activity in vertebrate retina.
p0236 A73-28353

SIDEL'NIKOV, I. A.
Vestibular reactions to Coriolis accelerations under hypoxia conditions
p0088 A73-17691
Influence of stimulation of the vestibular analyzer under conditions of hypoxia on certain functions of the visual analyzer
p0280 A73-31516
Effectiveness of some hemodynamic indices in the detection of vestibulo-vegetative disorders under ordinary conditions and those of hypoxia
p0303 A73-34121

SIDELNIKOV, I. A.
Vestibular reactions during exposure to coriolis accelerations under hypoxic conditions
p0065 N73-12092
Effect of vestibular analyzer irritation under hypoxic conditions on some visual analyzer functions
p0263 N73-23040

SIDENKO, V. V.
Virucidal action of hydrogen peroxide aerosols in decontamination of air in an influenza nidus
[NASA-TT-F-15127] p0438 N73-32006

SIDERIS, D. A.
Atrioventricular block response to exercise and intraventricular conduction at rest.
p0583 A73-11506

SIDEHOV, V. M.
Simplified method of multiple implantation of electrodes in the subcortical structures of the brain
[NASA-TT-F-15001] p0366 N73-27947

SIDKO, F. Y.
Determination of the light status in suspensions of algae
p0378 N73-29325
The theory of photosynthesis of algae
p0378 N73-29326

SIEGEL, P. V.
Military contributions to aviation medicine.
[AIAA PAPER 73-68] p0086 A73-17636
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers.
p0330 A73-36936
The current status of drug use in civil aviation personnel
p0226 N73-21104

SIEGEL, S. M.
Life processes in ammonia - Anomalous germination behavior of onion seed in ammonia and amines.
p0203 A73-26491
The effects of mercury compounds on the growth and orientation of cucumber seedlings.
p0206 A73-27274
The evolution of lignin - Experiments and observations.
p0241 A73-29649

SIEMENS, W. D.
NASA's contributions to patient monitoring, appendix
[NASA-CR-131538] p0230 N73-21138

SIEWERT, R. D.
A method for defining down-wind evacuation areas for transportation accidents involving toxic propellant spills
[NASA-TM-X-68188] p0141 N73-16097

SIGEL, C.
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416

SIGGINS, G. R.
The development of synapses in the rat cerebellar cortex.
p0051 A73-14256

SIGUA, O. A.
Technique for the implantation of long-term diagnostic electrodes in the amygdaloid complex of the human brain
p0157 A73-22857

SIKHARULIDZE, A. I.
Influence of certain brain structures on the sulfhydryl-group, diphosphopyridine-nucleotide, and serotonin contents of the blood
p0157 A73-22856

SILINSH, E.
Fluorometric 11-hydroxy-corticosteroid assay in human blood plasma
[NASA-TT-F-15092] p0416 N73-30990

SILVER, C. A.
The employment of a spoken language computer applied to an air traffic control task.
p0083 A73-16728

SILVERMAN, F.
Pulmonary function in man after short-term exposure to ozone.
p0381 A73-40001

SILVERMAN, M. P.
Effect of iron and salt on prodigiosin synthesis in Serratia marcescens.
p0306 A73-34399

SILVERMAN, R. W.
A hybrid broad-band EEG frequency analyzer for use

in long-term experiments.
p0057 A73-14847
SILVERMAN, S. M.
Implications of psychoanalytic factors for Air Force operations.
p0196 A73-25340
SIMEONI, M.
The effects of muscular exercise on urinary excretions of adrenal harmones in the normal man
[NASA-TT-F-15046] p0374 N73-29043
SIMMONDS, R. C.
The mammalian response to lunar particulates.
p0203 A73-26484
Microbial response to space environment, part B
p0232 N73-21762
Postflight analyses of Bacillus thuringiensis organisms exposed to space flight conditions
p0291 N73-24109
SIMMONS, J. B., II
Nonthermal metabolic response of rats to He-02, N2-02, and Ar-02 at 1 atm.
p0399 A73-42201
SIMON, P.
Solar flares and the terrestrial atmosphere
p0115 A73-19210
SIMON, W.
Automated three-dimensional dendrite tracking system.
p0359 A73-39763
SIMONOV, P. V.
Role of the hippocampus in the integrating activity of the brain
p0166 A73-24326
Utilization of human voice for estimation of man's emotional stress and state of attention.
p0195 A73-25329
The mechanisms of the occurrence of emotional stress in man.
p0328 A73-36920
The problem of spiritual requirements and the theory of human higher nervous activity
p0362 A73-39796
SIMONOV, Y. Y.
Aminotransferases of the blood serum of dogs following total exposure to gamma rays with the stomach or head shielded
p0213 N73-20075
SIMONSON, E.
Evaluation of cardiac performance in exercise.
p0043 A73-13539
SIMOONS, M. L.
Ischemic polarcardiographic changes induced by exercise - A new criterion.
p0432 A73-44946
SIMPSON, C. L.
Annual report for 1971 to the USAEC Division of Biology and Medicine. Volume 2: Physical sciences. Part 1: Atmospheric sciences
[BNWL-1651-VOL-2-PT-1] p0446 N73-33044
SIMPSON, D. W.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143
SIMPSON, R. W.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112
SIMPURA, S. P.
Change in the capacity of man to withstand transverse stresses after hypodynamia of varying duration
p0181 N73-19083
Change in certain indices of the function of external respiration during the action of G-forces
p0181 N73-19084
SINDERMANN, F.
Unusual properties of repetitive fasciculations.
p0359 A73-39761
SINDT, C. F.
Insulation of liquid oxygen dewars
[AD-763325] p0421 N73-31026
SINEV, A. V.
Determination of the spatial positions of the links in a manipulator mechanism
p0336 N73-26092
SINGER, G. A.
Advanced trash management system.
[ASME PAPER 73-ENAS-31] p0351 A73-37986
SINGER, J. R.
Recent measurements of flow using nuclear magnetic resonance techniques.
p0171 A73-24855
SINGER, R.
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
SINGH, M.
Redintegrated somatotyping.
p0096 A73-18474
SINGHAL, S.
Morphometry of the human pulmonary arterial tree.
p0384 A73-40639
SINHA, P.
Modeling food preferences over time
[AD-749079] p0102 N73-14100
SINIAK, IU. E.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Advanced methods of recovery for space life support systems.
p0347 A73-37711
SINIAKOV, A. F.
Blood circulation during controlled tachycardia
p0169 A73-24521
SINNETT, J. M.
The high q approach
[AD-757216] p0295 N73-24138
SINYAK, Y. Y.
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051
SINZ, R.
Examples for signal-noise improvement with the aid of polarity correlation analysis in the biological sector
p0086 A73-17593
SIROTA, S. S.
Investigation of certain indices of higher nervous activity in man during prolonged stay in a water environment
p0154 A73-22364
SIROTIUK, M. G.
Investigation of cutaneous sensibility by focused ultrasound
p0080 A73-16695
SITNIKOVA, L. G.
oribatid mites (acarina, orbatei) in Antarctica
p0379 N73-29349
SITNIKOVA, N. V.
The brightness coefficient of the soil-vegetation system as a function of some parameters of the plant cover
p0378 N73-29334
SITTERLEY, T. E.
Degradation of learned skills. A review and annotated bibliography
[NASA-CR-128611] p0603 N73-10152
Degradation of learned skills. Effectiveness of practice methods on simulated space flight skill retention
[NASA-CR-128612] p0603 N73-10153
Degradation of learned skills: Effectiveness of practice methods on visual approach and landing skill retention
[NASA-CR-128912] p0269 N73-23086
SITZ, T. O.
Purification of Synechococcus lividus by equilibrium centrifugation and its synchronization by differential centrifugation.
p0318 A73-36503
SIVINSKI, H. D.
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
SIVORINOVS'KII, G. O.
Influence of ultrasound and of a superhigh-frequency electromagnetic field in the three-centimeter band on the oxidative phosphorylation of liver and kidney mitochondria
p0154 A73-22368
SIZEMORE, D. A.
Regression of altitude-produced cardiac hypertrophy.

p0433 A73-45065

SJOFLOT, L.
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216

SKAVENSKI, A. A.
Normal fixation of eccentric targets.
p0275 A73-31018
Miniature eye movement.
p0383 A73-40411

SKEEN, C. H.
Ocular effects of repetitive laser pulses [AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria [AD-746793] p0071 N73-13097

SKIBO, G. G.
Structural characteristics of connections between medial efferent systems and spinal cord neurons
p0156 A73-22577

SKIDAN, M. A.
Use of the conditioned reflex method to study the motor analyzer during hygienic evaluation of working conditions in the presence of vibrations
p0429 A73-44673

SKIDMORE, R.
Conceptual design study for a teleoperator visual system, phase 1 [NASA-CR-124059] p0150 N73-17117

SKINHOJ, E.
Influence of carbon monoxide and of hemodilution on cerebral blood flow and blood gases in man.
p0324 A73-36659

SKOBELEVA, I. M.
Liquid flow in a pipe with a deformable wall and valves
p0126 A73-21375
Fluid flow in a tube with deformable wall in the presence of valves
p0298 N73-25117

SKOGMAN, D. P.
The role of helicopters in emergency medical care systems [AD-748695] p0101 N73-14087

SKOK, V. I.
Device for analyzing the electrical activity of nerve fibers in intact nerves
p0165 A73-23812

SKOROMETS, A. A.
Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160

SKRIPAL', A. V.
Study of the influence of weak electromagnetic field gradients on man
p0157 A73-22850
Influence of small electromagnetic-field fluctuations on the bioelectric activity of the human brain
p0395 A73-41964

SKUCE, D. R.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011

SKUKINA, I. S.
Results of cytogenetic studies of seeds after their extended orbital flight aboard the Salyut orbital scientific station.
p0397 A73-42169

SKUTT, H. R.
The use of telemetry to obtain physiological data during exercise.
p0052 A73-14278

SKVORTSOV, N. N.
Method for automatic processing of the indices of an operator's gas exchange during work in a trainer using a ""DNEPR'' electronic computer
p0444 N73-33035

SKVORTSOV, S. S.
Dosimetry of space radiations
p0173 N73-18100

SKVORTSOVA, E. B.
Effect of lunar soil on radiation injuries in mice.
p0077 A73-16090

SLEIGHT, P.
The effects of hypoxia, hypercapnia, and asphyxia on the baroreceptor-cardiac reflex at rest and during exercise in man.
p0094 A73-18348

SLEPCHUK, N. A.
Thermosensitive interoreceptors and their interaction with thermosensitive structures of the hypothalamus
p0164 A73-23803

SLINEY, D. H.
Hazards from high intensity lamps and arcs
p0145 N73-17071
New standards for ultraviolet radiation
p0148 N73-17094
Evaluation of Hadron Model 112 Laser Safety Eyeshields, January - March 1973 [AD-759921] p0337 N73-26099

SLKUNI, E. KH.
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751

SLOBODIANIUK, T. M.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
The influence of change in the functional state of the central nervous system on the course of asphyxia
p0166 A73-23937

SLONIM, A. D.
Chemical thermoregulation after an 'accelerated' adaptation to the cold
p0430 A73-44721

SLUTSKII, L. I.
Study of the relations between various mechanical properties and biochemical composition of bone tissues in man
p0234 A73-27996

SMILES, K. A.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task [AMRL-TR-72-3] p0189 N73-19154
Human performance capability in the aircraft acceleration environment of aerial combat [AD-759174] p0300 N73-25134

SMIRENNYY, L. N.
Dosimetry of space radiations
p0173 N73-18100

SMIRNOV, A. G.
Age pecularities of whole-blood transketolase activity in healthy persons
p0276 A73-31164

SMIRNOV, A. V.
The question of modeling certain motor functions of the human arm
p0336 N73-26091

SMIRNOV, B. A.
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries
p0429 A73-44720

SMIRNOV, G. D.
Structurally functional properties of the dendrites of central neurons
p0426 A73-43926

SMIRNOV, K. N.
Changes in gaseous metabolism and cardiac output per minute during local muscle work in man
p0164 A73-23809

SMIRNOV, K. V.
Effect of accelerations on the active transport of glucose in the small intestine of rats
p0442 N73-33021

SMIRNOVA, L. A.
Effect of stimulation of the hypothalamus on the pH of arterial and venous blood
p0382 A73-40281

SMIRNOVA, N. P.
Cerebellar responses of animals under varied rotation conditions in a centrifuge
p0279 A73-31506
Cerebellar reactions during different regimes of rotation of animals on a centrifuge
p0262 N73-23030

SMIRNOVA, P. V.
Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061

SMITH, A. H.
Organ and body mass changes in restrained and fasted domestic fowl. p0057 A73-14975
Gravity as a factor in the animal environment. p0197 A73-25573
Metabolic responses of monkeys to increased gravitational fields. p0314 A73-35982
Effects of chronic acceleration in animals. p0398 A73-42177
The foundations of space biology and medicine. Volume 2: Ecological and physiological bases of space biology and medicine. Part 3: Effect on the organism of dynamic flight factors. Chapter 1: Principles of gravitational biology [NASA-CR-128471] p0593 N73-10075
SMITH, B. E.
Acoustic-optical detection of decompression sickness in hamsters [AD-743475] p0595 N73-10091
SMITH, C.
An evaluation of the effects of bed rest, sleep deprivation and discontinuance of training on the physical fitness of highly trained young men [NASA-CR-134044] p0438 N73-32008
SMITH, D. B.
Distribution of the human average movement potential. p0242 A73-29990
SMITH, D. G.
Motion sickness symptomatology and performance decrements occasioned by hurricane penetrations in C-121, C-130 and F-3 Navy aircraft. p0050 A73-14161
Comparative motion sickness symptomatology and performance decrements occassioned by hurricane penetrations in C-121, C-130, and F-3 Navy aircraft [AD-743928] p0596 N73-10100
SMITH, D. P.
Color naming and hue discrimination in congenital tritanopia and tritanomaly. p0120 A73-20251
SMITH, G. W. T.
Ocular side effects of drugs in aviation medicine p0228 N73-21121
SMITH, H. E.
The EKG isolator and cardiotachometer system p0261 N73-22924
SMITH, H. P. R.
Sleep loss in air cabin crew. p0355 A73-39109
SMITH, J. R.
Quantitative analysis of the physiological condition and level of alertness of man in an isolated environment [AD-751272] p0142 N73-16105
SMITH, L.
AIAA employment workshops. Volume 2: An analytic report on some effects of twenty-two workshops [PB-209367] p0604 N73-10159
SMITH, M. C.
Space food systems - Mercury through Apollo. p0050 A73-14168
Apollo diet evaluation - A comparison of biological and analytical methods including bioisolation of mice and gamma radiation of diet. p0355 A73-39103
SMITH, M. C., JR.
Nutrition systems for pressure suits. p0355 A73-39105
Food and nutrition studies for Apollo 16 [NASA-TM-X-58096] p0067 N73-12110
SMITH, M. G.
Ocular effects of repetitive laser pulses [AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria [AD-746793] p0071 N73-13097
SMITH, M. J.
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/. p0154 A73-22529
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet simulated [AD-748192] p0103 N73-14105
Empirical reduction in potential user population as the result of imposed multivariate anthropometric limits [AD-752032] p0151 N73-17124
SMITH, N. P. D.
The effects of the Westinghouse active magnetometer /WD-4/ on implanted cardiac pacemakers. p0330 A73-36936
SMITH, N. T.
Regional myocardial dynamics from single-plane coronary cineangiograms. p0171 A73-24771
SMITH, R. C.
Intellectual ability and performance on a non-verbal problem-solving task. p0044 A73-13553
Sonic booms and sleep - Affect change as a function of age. p0324 A73-36780
Comparison of the job attitudes of personnel in three air traffic control specialties. p0355 A73-39108
Job attitudes of air traffic controllers: A comparison of three air traffic control specialties [FAA-AM-73-2] p0339 N73-27066
SMITH, R. E.
Circadian phase relationships in monkeys p0224 N73-21088
SMITH, R. P.
Correlation of electrocardiographic studies and arteriographic findings with angina pectoris. p0085 A73-17279
The measurement of pulmonary extravascular water volume during exposure to simulated high altitude [AD-763355] p0418 N73-31004
SMITH, R. H.
The landing signal officer: A preliminary dynamic model for analyses of system dynamics [AD-762728] p0377 N73-29064
SMITH, R. P.
Reaction time to changes in the tempo of acoustic pulse trains. p0404 A73-42705
SMITH, V. C.
Color vision of normal observers. p0079 A73-16481
Psychophysical estimates of optical density in human cones. p0246 A73-30402
SMITH, W. L.
Crew equipment applications - Firefighter's Breathing System. [ASME PAPER 73-ENAS-24] p0350 A73-37980
SMITH, W. S., JR.
Effects of neuromuscular tension in the use of an isometric hand controller [AD-757252] p0269 N73-23089
SMITTLE, J. H.
Current versus stagnant jet pilots' response times: A comparison [AD-761463] p0421 N73-31025
SMOLENSKAYA, I. N.
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells p0443 N73-33024
SMOLYAN, G. L.
Development of man-computer interaction [JPRS-59149] p0340 N73-27070
SMOOT, C. H., III
Hematological viscometry p0231 N73-21142
SMYSHLIAEVA, V. V.
Effect of a 5-day space flight on cardiodynamics during physical work of moderate intensity p0588 A73-12467
Effect of a 5-day space flight on the cardiac dynamics during moderately severe physical work. p0284 A73-32617
SNEATH, P. H. A.
Life sciences and space research XI; Proceedings of the Fifteenth Plenary Meeting, Madrid, Spain, May 10-24, 1972. p0395 A73-42158
SNOW, C. C.
High density loading of multiple occupant flotation devices.

p0284 A73-32658
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
SNOW, G. R.
A visual stimulator employing a T.V. raster display.
p0246 A73-30400
SNOW, H. D.
External field electromagnetic measurement of blood flow - An alternative approach to the solution of the baseline problem.
p0061 A73-15992
SNYDER, A. W.
The Stiles-Crawford effect - Explanation and consequences.
p0246 A73-30396
Image detection by a bee ommatidium.
p0424 A73-43344
SNYDER, R. G.
Impact
p0105 N73-15097
Link system of the human torso
[AD-754924] p0223 N73-20151
SNYDER, T. A.
Human engineering for the Air Force control display program
[AD-754916] p0223 N73-20148
SOBAGAKI, H.
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844
SOBEL, B. E.
Left ventricular performance after myocardial infarction assessed by radioisotope angiocardiography.
p0130 A73-21801
SOBOCINSKA, J.
The effect of prolonged immobilization on diuresis and water intake in rats.
p0203 A73-26489
The effect of immobilization on body fluid volume in the rat.
p0358 A73-39487
SOBOTA, A.
Changes caused by illumination in the Na+, K+ adenosine-triphosphatase and p-nitrophenyl-phosphatase activities of the external segments of the retina
p0235 A73-28294
SODAL, I. E.
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610
SODERBERG, G.
Interindividual differences in homomodal and heteromodal scaling.
p0204 A73-26750
SODI-PALLARES, D.
Clinical electrocardiographic and vectorcardiographic diagnosis of left posterior subdivision block, isolated or associated with RBBB.
p0058 A73-15200
Polyparametric information of the electrocardiogram in injured tissue.
p0405 A73-42834
SOELL, H.
Problems of detecting and measuring psychic stress
p0163 A73-23684
SOFIOS, M.
Microbial contamination of water - Traditional and space-age problems and approaches.
[ASME PAPER 73-ENAS-33] p0351 A73-37988
SOKOLIAN'SKII, I. P.
Some physiological reactions to acceleration in albino rats in a state of hypothermia
p0084 A73-16737
SOKOLKOV, V. I.
Basal metabolism under conditions of simulated weightlessness
p0181 N73-19082
SOKOLOV, A. A.
Binary regularities in the electrical wave spectrum of the brain
p0588 A73-12557
SOKOLOV, E. N.
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719
SOKOLOV, IA. A.
Binary regularities in the electrical wave spectrum of the brain
p0588 A73-12557
SOKOLOV, N. L.
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Gas chromatographic investigations of volatile products of human metabolism accompanying reduced food intake and starvation
p0064 N73-12091
SOKOLOVA, T. A.
Effect of accelerations on the active transport of glucose in the small intestine of rats
p0442 N73-33021
SOKOLOVICH, G. E.
Apparatus for measuring the colloid osmotic pressure in blood serum
p0425 A73-43792
SOKOLOVS'KII, V. S.
Body thermotopography and some metabolic process characteristics in scuba divers under various underwater exposure conditions
p0084 A73-16734
SOLDATOVA, K. A.
Participation of the hippocampal structures in the formation of external inhibition
p0092 A73-18162
SOLEILHAVOUP, J. P.
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
SOLIDAY, S. M.
An evaluation of sinus arrhythmia as a measure of mental load.
p0082 A73-16718
Use of a response surface to optimize digital telecommunication systems.
p0423 A73-43214
SOLIMAN, M. M.
Study and development of a cryogenic heat exchanger for life support systems
[NASA-CR-124301] p0340 N73-27071
SOLLERTINSKAIA, T. M.
Comparative physiological characteristics of functional relations among the hypothalamus and the olfactory and limbal systems of the brain
p0575 A73-10151
SOLODOVNIK, F. A.
Effect of Coriolis acceleration on the vestibular apparatus of a cosmonaut and its experimental study in the laboratory
[NASA-TT-F-15129] p0417 N73-30993
SOLOGUB, E. B.
Electrical activity of the human brain in the process of motor action
p0389 A73-41289
SOLOMATIN, V. P.
A model of a memory device based on neuron-like elements which realizes the holographic principles of data recording and readout
p0061 A73-15792
SOLOMATINA, E. S.
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549
SOLOMIN, G. I.
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
SOLOMON, H. S.
What mediates the renal vascular response to a salt load in normal man.
p0577 A73-10170
SOLOV'EV, V. I.
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
SOLOVIOV, V. P.
Modeling of water metabolism in the organism
p0166 A73-23941
SOLOWAY, A. H.
Oxygen metabolism: Metabolic implications in hyperbaric systems
[AD-749381] p0103 N73-14106

SOH, N. I.
Role of the hypothalamus and the limbic system of the brain in regulating vegetative functions
p0382 A73-40276
SOHANI, P.
Nutritional circulation in the heart. IV - Effect of calcium chloride and potassium chloride on myocardial hemodynamics and clearance of rubidium-86.
p0288 A73-33990
SOMERVILLE, W.
Emotions, catecholamines and coronary heart disease.
p0405 A73-42837
SONJEN, G.
Sensory coding in the mammalian nervous system.
p0199 A73-25799
SOMMER, H. C.
Combined effects of noise and vibration on human tracking performance and response time.
[AD-759329] p0196 A73-25334
Interactive effects of intense noise and low-level vibration on tracking performance and response time.
p0386 A73-41153
Combined effects of noise and vibration on cognitive and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
Description and use of a measurement system for air bag acoustic transient data acquisition and analysis
[AD-761836] p0370 N73-27977
SOMMER, H. J.
Complete and isoenzyme content of lactate dehydrogenase in plasma, leukocytes and erythrocytes in myeloproliferative diseases
[NASA-TT-F-14586] p0592 N73-10070
SOMMERS, J., JR.
A comparison of general aviation occupant restraint systems
[FAA-NA-73-30] p0375 N73-29052
SONES, F. M., JR.
Indications and value of coronary arteriography.
p0405 A73-42830
SONNENBLICK, E. H.
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685
SORDAHL, L. A.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686
SOREM, K. R.
Effect of free fatty acid on myocardial function during hypoxia.
p0241 A73-29572
SORIARUIZ, J. A.
Solvent effect of ESR spectra of nitroxide free radicals
[NASA-TT-F-14866] p0220 N73-20125
SORKIN, R. D.
The theory of signal detectability.
p0243 A73-30278
SOROKINA, G. V.
Peripheral blood composition changes in cosmonauts during 18- and 24-day space flights
p0208 A73-27710
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104
SOROKOUMOV, V. A.
Effect of ethimizol on short term memory and mental working capacity
p0092 A73-18160
SORVACHEVA, Z. K.
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024
SOTNIKOV, E. E.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
SOTNIKOV, Y. Y.
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
SOUTH, F. E.
Contraction kinetics of ventricular muscle from hibernating and nonhibernating mammals.
p0358 A73-39603
SOWTON, E.
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
SPAAN, J. A. E.
Transfer of oxygen into haemoglobin solution.
p0426 A73-43993
SPACH, M. S.
Intracellular-extracellular action potentials - Considerations for the formation of wavefronts and their detection on the body surface.
p0319 A73-36518
Physiologic correlates and clinical comparisons of isopotential surface maps with other electrocardiographic methods.
p0319 A73-36519
SPANGLER, R. D.
A comparison between the effects of dynamic and isometric exercise as evaluated by the systolic time intervals in normal man.
p0122 A73-20369
SPANN, J. F., JR.
Problems in the recognition of angina pectoris.
p0321 A73-36541
Alterations of cardiac sympathetic neurotransmitter activity in congestive heart failure.
p0404 A73-42690
SPARSCHU, G. L.
Toxicological evaluation of a beryllium motor exhaust product
[AD-756531] p0259 N73-22042
SPEARS, W. R.
A study of ventricular contractility and other parameters possibly related to vasodepressor syncope
[NASA-CR-128968] p0333 N73-26056
SPECER, D. J.
IR laser radiation eye protector
[AD-753080] p0178 N73-18142
SPEKREIJSE, H.
Visually evoked cortical potentials to patterned stimuli in monkey and man.
p0359 A73-39760
Visually evoked cortical potentials to patterned stimuli in monkey and man
[IZF-1972-24] p0264 N73-23049
SPENCER, H. C.
Toxicological evaluation of a beryllium motor exhaust product
[AD-756531] p0259 N73-22042
SPENCER, J. L.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172
SPENCER, R.
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133
SPERANSKII, M. M.
Angiotensiotonography using an air plethysmograph
p0322 A73-36575
SPERELAKIS, N.
Electrical properties of embryonic heart cells.
p0197 A73-25589
SPICHINETSKIY, B. Y.
Ways to increase effectiveness of physical training
p0263 N73-23039
SPIER, R. A.
Tilting table for ergometer and for other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
SPINELLI, D.
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119
SPINNLER, G.
Human calorimeter with a new type of gradient layer.
p0324 A73-36662
SPIRIN, A. S.
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945

SPIZIZEN, J.
Microbial response to space environment, part B
p0232 N73-21762
Effects of space environment on T-7 bacteriophage and spores of Bacillus subtilis 168
p0291 N73-24107
SPODICK, D. H.
The influence of recording speed on apexcardiographic timing - A multi-observer study of precision and performance utilizing randomized tracings in multiple subjects.
p0118 A73-19932
Effects of posture on exercise performance - Measurement by systolic time intervals.
p0353 A73-38260
Ejection time by ear densitogram and its derivative - Clinical and physiologic applications.
p0353 A73-38866
SPOTNIZ, H. M.
Structural conditions in the hypertrophied and failing heart.
p0403 A73-42685
SPRAGUE, C. H.
Design and evaluation of a backhoe model with a master slave control.
p0352 A73-38085
SPRAUL, J. H.
Medical automation system at the Marshall Space Flight Center
p0145 N73-17068
SPURLOCK, J. M.
Progress in the development of the reverse osmosis process for spacecraft wash water recovery.
p0584 A73-11993
Evaluation of proposed Skylab and SSP soap products. [ASME PAPER 73-ENAS-26] p0350 A73-37981
Evaluation of proposed Skylab and SSP soap products [NASA-CR-128880] p0222 N73-20143
SPURRELL, R. A. J.
Study of intraventricular conduction times in patients with left bundle-branch block and left axis deviation and in patients with left bundle-branch block and normal QRS axis using His bundle electrograms.
p0080 A73-16582
SQUIRES , W.
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
SQUIRES, K.
Loudness enhancement following contralateral stimulation.
p0581 A73-10827
SQUIRES, K. C.
Cortical potentials evoked by confirming and disconfirming feedback following an auditory discrimination.
p0153 A73-21895
SRAPIONIAN, R. M.
The presence in the heart of compounds which participate in the neurohumoral regulation of coronary circulation
p0430 A73-44769
SRIRAM, S.
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
SRIVASTAVA, K. K.
Serum creatine phosphokinase activity and urinary excretion of creatine and creatinine in man during acclimatization to high altitude and in high altitude natives.
p0196 A73-25333
ST.ROSE, J. E. M.
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble [DCIEM-882] p0376 N73-29056
ST-CYR, G. J.
Signal and noise in the human oculomotor system.
p0407 A73-42964
STABELL, B.
Chromatic rod vision. II - A theoretical survey.
p0121 A73-20261
STABELL, U.
Chromatic rod vision. II - A theoretical survey.
p0121 A73-20261
STAFFORD, R. G.
Respirator cartridge filter efficiency under cyclic- and steady-flow conditions.
p0383 A73-40408
STAGG, D.
Computer acquisition of multiunit nerve-spike signals.
p0403 A73-42671
STAHL, C.
A new method for diagnosing myocardial damage in patients with normal electrocardiograms and vector cardiograms.
p0287 A73-33375
STAKENBURG, H.
Paced and selfpaced work in continuous reaction time tasks [IZF-1973-5] p0268 N73-23077
STALBERG, E.
Long-term EEG-telemetry.
p0054 A73-14298
STALEY, R. W.
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
STAMPS, R. F., JR.
Frequency analysis of spatio-temporal visually evoked cortical potentials during binocular rivalry.
p0312 A73-35645
STANEK, J.
Peripheral threshold of perceived contrast of the human eye.
p0159 A73-22964
STANEK, P.
Study of capabilities, necessary characteristics and effectiveness of pilot ground trainers. Volume 1: Main text [AD-755681] p0341 N73-27081
STANLEY, E.
Experiences with physical conditioning programs in middle-aged men
p0143 N73-17051
STAPLEFORD, R. L.
Motion cue effects on pilot tracking
p0602 N73-10141
STARCHIK, V. P.
Automated system of storing and processing vectorcardiograms
p0580 A73-10660
STARK, E. A.
Naval Pilot training system study. Volume 1: Basic report [AD-756638] p0296 N73-24143
STARK, L.
Pupil movements to light and accommodative stimulation - A comparative study.
p0246 A73-30395
STARK, W. J.
Is physical and mental exhaustion caused by a shortage of atmospheric ions? [NASA-TT-F-14646] p0070 N73-13088
STARLINGER, H.
Methodical studies concerning the polarographic measurement of respiration and 'critical oxygen pressure' in mitochondria and isolated cells with the aid of the membrane-covered platinum electrode
p0056 A73-14647
STARMER, C. F.
Evaluation of several methods for computing stroke volume from central aortic pressure.
p0384 A73-40638
STAROBINETS, M. KH.
Correlation between the voltage-time curves of H- and M-responses of a human muscle during various functional states of the spinal center
p0047 A73-13819
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
STARR, I.
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174
STARUSHENKO, L. I.
Reactivity and certain metabolic indices during

prolonged sustenance of animals in artificial nutrient conditions
p0276 A73-31162

STAUCH, M.
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699

STAUDINGER, H.
Fractioning and determination of corticosteroids in urine by thin layer chromatography
[RAE-LIB-TRANS-1694] p0333 N73-26062

STAVRO, W.
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118

STEBEL, J.
Examples for signal-noise improvement with the aid of polarity correlation analysis in the biological sector
p0086 A73-17593

STECHER, S.
Spatial frequency channels in human vision and the threshold for adaptation.
p0346 A73-37416

STEEB, R.
Interactive aspects of man/learning system control teams.
p0081 A73-16708
Man/machine interaction in adaptive computer aided control initial study
[AD-754835] p0222 N73-20147

STEES, J. L.
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Mechanisms of oxygen toxicity at the cellular level
[AD-758725] p0299 N73-25124

STEFADOUROS, M. A.
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259

STEFAN, G.
Echocardiographic findings in experimental myocardial infarction of the posterior left ventricular wall.
p0587 A73-12446

STEFL, M.
Backward masking and enhancement of multisegmented visual targets.
p0193 A73-25133

STEIGER, E.
Study of the resistance of cultured and natural microbes using the ethylene oxide sterilization method
[NASA-TT-F-14612] p0069 N73-13078

STEIGERWALT, J. E.
The calculation of proportional counter energy-deposition spectra from experimental data.
p0280 A73-31549

STEIN, G.
A design procedure and handling quality criteria for lateral directional flight control systems
p0601 N73-10137

STEIN, H. G.
Bone strength and in-flight mechancial stresses
[AD-754982] p0221 N73-20134

STEINBERG, R.
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
A high yield neutron target for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067

STEINBRECHT, I.
Determination of oxidized and reduced pyridine nucleotides in human and rabbit blood with the aid of the polarographic cycling technique
p0153 A73-21871

STEINBRUNN, J. H.
Technician requirements for maintenance of microelectronics equipment in the fleet
[AD-748040] p0074 N73-13123

STEINER, R. E.
Q waves and coronary arteriography in cardiomyopathy.
p0583 A73-11507

STEINHOFF, W.
Circadian rhythm variations of circulation respiration, and catabolism under flight stress conditions
[DLR-FB-72-49] p0413 N73-30073

STEININGER, K.
Diagnosis and prognosis of pilot reaction and resistance to psychical stress
p0368 N73-27962

STEINMAN, R. M.
Normal fixation of eccentric targets.
p0275 A73-31018

STEINMAN, G.
Clues from protobiochemical studies in the search for extraterrestrial probiotic signatures.
p0055 A73-14319

STEINMAN, R. M.
The smallest voluntary saccade - Implications for fixation.
p0246 A73-30394
Miniature eye movement.
p0383 A73-40411

STEKETEE, J.
Spectral emissivity of skin and pericardium.
p0427 A73-44213
The effect of transmission on temperature measurements of human skin.
p0428 A73-44217

STELL, W. K.
The morphological organization of the vertebrate retina.
p0160 A73-23304

STEMPIN, C. W.
Dynamic analyses of hybrid bio/mechanical networks with feedback characterization.
p0287 A73-33161

STEPANENKO, Y. A.
Features of the kinematics of manipulators and volumes methods
p0335 N73-26075
The question of manipulator activation by reversible follow-up systems
p0336 N73-26084
Determination of the spatial positions of the links in a manipulator mechanism
p0336 N73-26092

STEPANOV, G. N.
Role of living matter in carbonate formation
[NASA-TT-F-15028] p0375 N73-29046

STEPANOV, I. N.
Role of living matter in carbonate formation
[NASA-TT-F-15028] p0375 N73-29046

STEPANOV, IU. V.
The effects of training on some parameters of hemodynamics and of the oxygen transportation function of the blood during static strains
p0323 A73-36581

STEPANOV, L. N.
Gas-chromatography investigation of volatile metabolites in man on reduced food rations and during starvation
p0088 A73-17690
Gas chromatographic investigations of volatile products of human metabolism accompanying reduced food intake and starvation
p0064 N73-12091

STEPANOVA, S. I.
Role of social synchronizers in the adaptation to an unusual daily routine
p0208 A73-27715
Investigation of the possibility of human adaptation to a 16-hour day
p0305 A73-34238
Role of social synchronizers in adaptation to unusual daily schedules
p0218 N73-20109
Study of the possibility of human adaptation to days of 16-hour duration
p0373 N73-29036

STEPANOVA, Z. I.
Virucidal action of hydrogen peroxide aerosols in decontamination of air in an influenza nidus
[NASA-TT-F-15127] p0438 N73-32006

STEPANTSOV, V. I.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning
p0182 N73-19095
Physical training as a method for preventing the hypodynamic syndrome

p0256 N73-22018

STEPHEN-SHERWOOD, E.
Chemical evolution - Recent syntheses of bioorganic molecules.
p0202 A73-26477

STEPOVIK, M. V.
Electrogastrographic data pertinent to exposures in a pressure chamber to moderate hypoxia levels
p0087 A73-17684
Results of electrogastrography during creation of moderate degrees of hypoxia in a pressure chamber
p0064 N73-12085

STERMAN, M. B.
Effects of hydrazine on electrophysiology, behavior and runway performance in the cat
[AD-746014] p0609 N73-11081
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses
[AD-746302] p0610 N73-11082

STERN, J. A.
The effect of fatigue on visual search activity
[AD-750097] p0113 N73-15171

STERN, S.
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492

STERNER, R. T.
Hypobaric hypoxia - Within-subject transition effects in albino rats.
p0086 A73-17525

STERNHEIM, C. E.
Visual sensitivity in the presence of alternating monochromatic fields of light.
p0129 A73-21567
A comparison of electrophysiological and psychophysical temporal modulation transfer functions of human vision.
p0237 A73-28360

STETSON, M. H.
Regulation of testis function in golden hamsters - A circadian clock measures photoperiodic time.
p0587 A73-12422

STETTNER, L. C.
Physiology of the rat in hyperbaric environments of helium, nitrogen and nitrous oxide
p0371 N73-29019

STEUNENBERG, R. K.
Research on oxygen recovery systems for use in space capsules
[NASA-CR-114573] p0300 N73-25130

STEVENS, A. B.
Application of color and color infrared aerial photography to Dutch elm disease detection
p0297 N73-25110

STEVENS, K. N.
Speech perception.
p0243 A73-30277

STEVENSON, R. F.
A dynamic model of the semicircular canal
p0111 N73-15153

STEVENSON, R. J.
The orbit and superior orbital fissure as an acoustic window.
p0402 A73-42667

STEVENSON, S. A.
Bibliography of research reports and publications issued by the Human Engineering Division, April 1946 - December 1970
[AD-749933] p0103 N73-14103

STEWART, J. S., II
Analysis of a description model for hand motion distance in a manual decision task
[AD-761518] p0370 N73-27973

STEWART, R. D.
Effect of carbon monoxide on time perception.
p0381 A73-40000
The effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123

STIBITZ, G. R.
A model of diffusion in the respiratory unit.
p0391 A73-41638

STOCLET, J.-C.
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160

STOEVA, N. K.
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107

STOJKOVIC, M.
Evaluation of auditory disorders in pilots by examining intratympanic muscles reflexes.
p0330 A73-36934

STOKES, R. E.
Handling the hijacker.
[AD-757130] p0589 A73-12564

STOLBOV, V. F.
Radiation-induced oxidation of impurities in the water obtained from human moisture-containing bioactivity products
p0124 A73-20984
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051

STOLIAROV, I. V.
Study of the possibilities of histone-RNA complex formation in experiments in vitro
p0168 A73-24513

STOLL, A. M.
Fire retardance of mixtures of inert gases and oxygen.
p0155 A73-22532
Assessment of temperature rise suppression by edge losses during irradiation.
p0155 A73-22533

STOLL, O. T.
Space Shuttle Orbiter ECLSS.
[ASME PAPER 73-ENAS-23] p0350 A73-37979

STOLWIJK, J. A. J.
Energy balance and lactic acid production in the exercising rabbit.
p0077 A73-16156
Differential thermal sensitivity in the human skin.
p0251 A73-30912

STOMA, M. F.
Reflex arch lability determination
p0401 A73-42659

STONE, G. C.
Focal and nonfocal processing of color and form.
p0388 A73-41182

STONE, H. L.
Myocardial metabolism during exposure to carbon monoxide in the conscious dog.
p0159 A73-22935
Coronary flow and left ventricular function during environmental stress.
p0162 A73-23380

STONE, L. J.
Factors concerned with sanitary landfill site selection: General discussion
[NASA-CR-128744] p0189 N73-19157

STONE, M. C.
Prevalence of hyperlipoproteinaemias in a random sample of men and in patients with ischaemic heart disease.
p0408 A73-42975

STOPER, A. E.
Apparent motion of stimuli presented stroboscopically during pursuit movement of the eye.
p0234 A73-28093

STORM, W. F.
Physiological cost in 36- and 48-hour simulated flights.
p0355 A73-39101
Effect of low humidity on human performance
[AD-756835] p0296 N73-24142

STOVIN, P. G. I.
Morphometric and histochemical investigation on human right atrial and mitral papillary muscle.
p0125 A73-21215

STRAND, J. C.
Changes in total plasma content of electrolytes and proteins with maximal exercise.
p0127 A73-21507

STRASCHILL, M.
The effect of iontophoretically applied acetylcholine upon the cat's retinal ganglion cells.
p0243 A73-30061
Optomotor integration in the colliculus superior of the cat.
p0316 A73-36443

STRASSER, H.
Work-physiological investigations for the objectivization of the tracking behavior, the mental load, and its psychopharmacological modulability
p0122 A73-20388
Physiological and operational state of a group of aeroplane pilots under the conditions of stressing tracking tests.
p0387 A73-41157

STREETER, R. G.
Effects of sodium pentobarbital on rats in normocapnic and chronically hypercapnic conditions [AD-751234]
p0187 N73-19142

STREL'NIKOV, V. A.
Auto-antibodies of an irradiated organism
p0060 A73-15711

STRELKOV, Y. K.
Ergonomics research methods
p0414 N73-30086

STROEVE, P.
Mechanism of oxygen transport augmentation by hemoglobin.
p0362 A73-39795

STROGANOVA, E. A.
Effect of lasting hypodynamia on rat biology
p0124 A73-20983

STROGANOVA, Y. A.
Effect of prolonged hypodynamic on rat biology
p0134 N73-16050

STRONGIN, G. L.
Reactions of the cardiovascular system of pilots with atherosclerosis symptoms under professional activity conditions
p0087 A73-17689
Cardiovascular system reactions in pilots with symptoms of atherosclerosis during professional work
p0064 N73-12090

STRUCHKOV, M. I.
Forward and backward conditional connections
p0248 A73-30568

STRYDOM, N. B.
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621

STRZHIZHOVSKII, A. D.
Effect of steady magnetic fields up to 4,500 Oe on the mitotic activity of the corneal epithelium in mice
p0279 A73-31510

STRZHIZHOVSKIY, A. D.
Effect of permanent magnetic fields up to 4500 oe on the mitotic activity of corneal epithelial cells in mice
p0263 N73-23034

STUBBS, S. E.
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505

STUL', N. I.
Role of visual and articular afferentation in the implementation of motor reactions involving complex coordination and precision
p0092 A73-18164

STURM, R. E.
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry.
p0348 A73-37795
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798

SUCHKOV, V. V.
Management of the treatment of illnesses as a problem of modern control theory
p0357 A73-39348

SUDAKOV, K. V.
Central mechanisms of the action of electromagnetic fields
p0248 A73-30571
Theoretical aspects of motivational stimulation
p0448 N73-33062

SUDAKOVA, V. V.
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397

SUDLOW, M. F.
Bulk elastic properties of excised lungs and the effect of a transpulmonary pressure gradient.
p0275 A73-31128
Transpulmonary pressure gradient and ventilation distribution in excised lungs.
p0276 A73-31129

SUDZILOVSKII, F. V.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227

SUDZILOVSKIY, F. V.
Central nervous system reaction to mechanical factors
p0372 N73-29024

SUGGS, C. W.
Human reactions to whole-body transverse angular vibrations compared to linear vertical vibrations.
p0423 A73-43216

SUGIE, N.
A model of eye movements induced by head rotation [AMRU-R-71-3]
p0607 N73-11065
Vestibulo-ocular responses in man during sleep [AMRU-R-70-3]
p0608 N73-11066

SUGIMOTO, T.
Effect of maximal work load on cardiac function.
p0288 A73-33991

SULIMO-SAMUILLO, Z. K.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227

SULIMO-SAMUILLO, Z. K.
Central nervous system reaction to mechanical factors
p0372 N73-29024

SULLIVAN, B. M.
Human response to transportation noise and vibration.
p0310 A73-35328

SULLIVAN, D. J.
Training effectiveness evaluation of naval training devices. Part 1: A study of the effectiveness of a carrier air traffic control center training device [AD-751556]
p0141 N73-16101

SULLIVAN, G. D.
Vernier acuity as affected by target length and separation.
p0041 A73-13063

SULLIVAN, M. J.
Sleep and memory.
p0093 A73-18225

SULLIVAN, R. W.
A study of ventricular contractility and other parameters possibly related to vasodepressor syncope [NASA-CR-128968]
p0333 N73-26056

SUMNER, J. S.
Telemetry experiments with a hibernating black bear [NASA-CR-133926]
p0418 N73-31000

SUN, P. B.
A performance measure for manual control systems
p0601 N73-10135

SUPAKOV, M. K.
Safety in handling rocket weapon systems
p0393 A73-41874

SURAWICZ, B.
The pathogenesis and clinical significance of primary T-wave abnormalities.
p0320 A73-36529

SUROVTSEV, N. A.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106

SUSHKOV, F. V.
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024

SUSLOVA, L. N.
Effect of antiradiation drugs on the functional condition of the vestibular analysor
p0279 A73-31509

Effect of radioprotectants on functional state of the vestibular analyzer
p0263 N73-23033

SUTHERLAND, H. C., JR.
Middle-ear muscle reflex to aircraft noise
[AD-764739] p0446 N73-33048

SUTHERLAND, N. S.
Vernier acuity as affected by target length and separation.
p0041 A73-13063

SUTRO, L. L.
Robot vision
[NASA-CR-133458] p0365 N73-27936

SUTTON-MATTOCKS, V. H.
Sleep loss in air cabin crew.
p0355 A73-39109

SUTTON, S.
Effect of stimulus uncertainty on the pupillary dilation response and the vertex evoked potential.
p0242 A73-29991

SUTULOV, L. S.
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076

Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085

SUTULOV, Y. L.
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076

Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085

SUVOROV, G. A.
Functional state of the cerebral cortex and of the mesencephalic reticular formation during prolonged action of impulsive and stable noise
p0167 A73-24334

Noise and noise sickness
[NASA-TT-F-748] p0365 N73-27935

SUVOROV, N. B.
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445

SUVOROV, P. M.
Analysis of some mechanisms of human stability to decompression of the lower portion of the body
p0124 A73-20987

Analysis of some mechanisms of man's tolerance to lower body decompression
p0135 N73-16054

SUVOROV, V. V.
Cerebral circulation alteration during hypothermia
p0081 A73-16698

SUZUKI, J.-I.
Vestibular and spinal control of eye movements.
p0316 A73-36440

SVECHNIKOV, S. V.
Electrooptical model of the first retina layers of a visual analysor
p0045 A73-13657

SVIREZHEV, IU. M.
Mathematical modeling of biological systems
p0154 A73-22347

SVIRIDOVA, G. P.
Physiological effect of air nitrogen replacement by inert gases under high and low temperature conditions
p0207 A73-27701

Physiological effect of the replacement of atmospheric nitrogen by inert gases at high and low temperature
p0216 N73-20095

SWAIN, D.
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133

SWALLOW, J. E.
Some experiments on the friction of fabrics on human skin
[RAE-TR-72037] p0604 N73-10157

SWAN, H. J. C.
Power failure of the heart in acute myocardial infarction.
p0321 A73-36547

SWANSON, B. G.
The effect of temporal uncertainty on human energy expenditure during moderate exercise
[AD-743726] p0594 N73-10084

SWEAT, V. E.
Heating of food in modified atmospheres
[NASA-CR-134040] p0419 N73-31012

SWIDER, J. E., JR.
Zero-gravity and ground testing of a waste collection subsystem for the Space Shuttle.
[ASME PAPER 73-ENAS-42] p0351 A73-37989

Waste collection subsystem development
[NASA-CR-133977] p0366 N73-27945

SWINK, J. R.
Automated flight training (AFT). Instrument flight maneuvers
[AD-759366] p0341 N73-27080

SWISHER, G. M.
Noise effects on the critical tracking performance of the human operator.
p0575 A73-10107

SWORD, A. J.
Touch sensors and control.
p0344 A73-37328

Studies to design and develop improved remote manipulator systems
[NASA-CR-2238] p0260 N73-22055

SYLVESTER, N. D.
An analysis of blood flow.
p0042 A73-13302

SYMINGTON, L. E.
Reaction time: A bibliography with abstracts. Supplement 2, with subject index
[AD-745416] p0596 N73-10095

SYMONS, J. J.
Laundering in space - A summary of recent developments.
[ASME PAPER 73-ENAS-43] p0351 A73-37990

SYROVEGIN, A. V.
Reflex excitability of spinal motor neurons in man under high atmospheric pressure
p0169 A73-24525

Posture responses of upper limb muscles during electric stimulation of the vestibular apparatus
p0199 A73-26087

Influence of increased air atmosphere pressure on the excitability of the neuro-motor apparatus in man
p0249 A73-30845

SYVERTSEN, G. R.
Erythropoietin production in dogs exposed to high altitude and carbon monoxide.
p0358 A73-39599

SYZRANTSEV, Y. K.
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089

SZEGSZARDY, T.
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586

SZENTAGOTHAI, J.
Lateral geniculate body structure and eye movement.
p0317 A73-36448

SZIDON, J. P.
Experimental myocardial infarction - Hemodynamic evaluation.
p0321 A73-36540

SZOBADY, I.
Observations concerning the combined radiation-protective effect of pantothenic acid and aminoethylisothiuronium
p0583 A73-11586

SZOSTAK, H.
Estimation of automobile-driver describing function from highway tests using the double steering wheel
p0601 N73-10132

SZYDLIK, P. A.
Effect of free fatty acid on myocardial function during hypoxia.
p0241 A73-29572

T

TAAM, D.
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100

TACCARDI, B.
An instrument with 240 probes for mapping the cardiac potential
p0167 A73-24422

TAEUBER, E.
Investigations of the eye tracking system through stabilized retinal images.
p0317 A73-36456

TAGLIASCO, V.
Central programming and peripheral feedback during eye-head coordination in monkeys.
p0317 A73-36452

TAKAHAMA, K.
Analysis of contrast and assimilation effects on the basis of receptive field models.
p0123 A73-20812

TAKAHASHI, E.
Rabbit optokinetic reactions and retinal direction-selective cells /A preliminary model/.
p0317 A73-36455

TAKAHASHI, K.
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929

TAKISHIMA, T.
Tests of a model of pulmonary elasticity.
p0048 A73-14114
'Closing volumes' and decreased maximum flow at low lung volumes in young subjects.
p0158 A73-22929

TAL'NOV, A. N.
Functional characteristics of different neurons in the auditory cortex
p0349 A73-37940

TALAYEV, S. A.
Model of the organization of goal-directed behavior
p0448 N73-33061

TAMAROVA, Z. A.
Cortico-pyramidal and cortico-extrapyramidal synaptic effects on lumbar motor neurons in monkeys
p0156 A73-22578

TAN, M.
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964

TANAKA, M.
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581

TANDON, S. N.
Electrical field distribution in the human body.
p0427 A73-44216

TANNER, J. A.
Radiofrequency fields - A new ecological factor.
p0392 A73-41787

TANNER, W. P., JR.
The theory of signal detectability.
p0243 A73-30278

TARAN, V. A.
Some approaches to the quality evaluation of the ergatic process of a spacecraft rendezvous
p0087 A73-17686
Some methods for evaluating the quality of the ergatic process during approach of space vehicles
p0064 N73-12087
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems
p0336 N73-26090

TATARINOV, L. I.
Probabilistic statistical methods for analysis of impulse flows in nerves
p0354 A73-39002

TATARINOVA, N. V.
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Some characteristics of hemodynamics in an orthostatic test for persons with different vestibular-autonomic tolerance
p0373 N73-29034

TATINIAN, N. G.
Automatic identification of cardiac rhythm and conductivity disturbances with the aid of digital computers
p0384 A73-40751

TAUBER, I. N.
Nonlinear method of analyzing electroencephalograms
p0580 A73-10661

TAVEL, M. E.
Assessing the severity of aortic stenosis by phonocardiography and external carotid pulse recordings.
p0354 A73-38867

TAVES, P.
Visibility of an afterimage alone and in the presence of one or two additional afterimages.
p0153 A73-21894

TAVKHELIDZE, N. N.
Dynamics of changes in neuron activity regimes of the ascending auditory pathways
p0199 A73-26079

TAYLOR, D. E. M.
Pattern of blood flow within the heart - A stable system.
p0125 A73-21214

TAYLOR, D. M.
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118

TAYLOR, G. R.
Apollo 14 microbial analyses
[NASA-TM-X-58094] p0099 N73-14073
Microbial response to space environment, part B
p0232 N73-21762
Proceedings of the Microbial Response to Space Environment Symposium
[NASA-TM-X-58103] p0291 N73-24102
Background and general design of the microbial response to space environment experiment (M191) system
p0291 N73-24103
Infectivity and egg production of Nematospiroides dubius as affected by space flight and ultraviolet irradiation
p0291 N73-24106

TAYLOR, J. H.
Vision
p0105 N73-15104
Air-to-ground visibility of lights at low background levels
p0191 N73-19967

TAYLOR, K.
Measurement of left anterior descending coronary arterial blood flow - Technique, methods of blood flow analysis and correlation with angiography.
p0428 A73-44469

TAYLOR, K. W.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860

TAYLOR, M. L.
Analysis of soluble beryllium by gas chromatography
[AD-753112] p0177 N73-18131

TAYLOR, P.
The motivating influence of retest and repeated dietary counseling on cholesterol reduction
p0146 N73-17081

TAZETDINOV, I. G.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057

TEFT, L. W.
Space-time relations - The effects of variations in stimulus and interstimulus interval duration on perceived visual extent.
p0085 A73-17199

TEICHMANN, J.
Gas-blood CO2 equilibration in dog lungs during rebreathing.
p0048 A73-14115
Rebreathing and steady state pulmonary diffusing capacity for O2 in the dog and in inhomogeneous

lung models.
p0391 A73-41639
TEICHNER, W. H.
Estimating the detectability of target luminances.
p0093 A73-18242
Predicting human performance 3: Detection of a simple visual signal as a function of time of watch
[AD-745317] p0596 N73-10097
TEMPLETON, G. H.
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
TEPPER, E. S.
Investigation of the disinfecting properties of sorbents which are used in a spacecraft life support system
p0306 A73-34240
TEPPER, Y. S.
Investigation of decontaminating properties of sorbents used in the life support system of spaceships
p0374 N73-29038
TER BRAAK, J. W. G.
Ambivalent optokinetic stimulation and motion detection.
p0318 A73-36458
TER-POGOSSIAN, M. M.
Correlation between arterial carbon dioxide tension and regional cerebral blood volume by X-ray fluorescence.
p0361 A73-39790
TERASAWA, Y.
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
TEREKHINA, A. IU.
Multidimensional scaling methods and data visualization /Review/
p0425 A73-43578
TEREKHOV, V. A.
Interaction between man and an electronic computer in operational planning
p0178 N73-18138
TEREKHOV, Y. V.
The recording of cardiac rhythms on a magnetic tape for later computer input analysis
[AD-748105] p0075 N73-13124
A universal calibrator for steadiness of stance measuring platforms
[AD-763093] p0377 N73-29066
New instrumentation for measurement of man's stability of stance
[AD-763096] p0377 N73-29067
TERENTYEV, V. G.
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079
TERESHCHENKO, A. P.
Spectral method of trace element determination in biological sample solutions
p0088 A73-17692
Certain indices of the material balance of man as a component in a closed ecological system
p0184 N73-19107
Determining copper, iron, cobalt, nickel and manganese in biological samples of plant origin
p0256 N73-22022
TERRY, P.
Towards jet indoctrination.
p0275 A73-31095
TEUBER, H.-L.
Visual field defects after missile injuries to the geniculo-striate pathway in man.
p0390 A73-41600
TEYLER, T. J.
Biocybernetics: An interactive man-machine interface
[AD-746179] p0612 N73-11101
THACH, J. S., JR.
Rhesus monkey heart rate during exercise
[AD-744930] p0595 N73-10089
THACKRAY, R. I.
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
THEOLOGUS, G. C.
Development of a standardized battery of performance tests for the assessment of noise stress effects
[NASA-CR-2149] p0148 N73-17102
THORELL, T.
Psychosocial factors and myocardial infarction - Why and how.
p0405 A73-42833
THIBOS, L. N.
Electrophysiological evidence that abnormal early visual experience can modify the human brain.
p0278 A73-31371
THIEHLER, A.
Preparative electrophoresis experiment design
[NASA-CR-123972] p0101 N73-14090
THODEN, J.
Control of exercise hyperpnea under varying durations of exposure to moderate hypoxia.
p0042 A73-13499
THODEN, J. S.
Time course of respiratory adaptation to high altitude
[AD-755192] p0267 N73-23075
THODEN, U.
Cholinergic activation of vestibular neurones leading to rapid eye movements in the mesencephalic cat.
p0316 A73-36439
THOMAS, A. A.
Effects of methylene chloride exposure on the spontaneous activity of mice
[AD-751435] p0139 N73-16082
THOMAS, D. J.
Human head and neck response to impact acceleration
[AD-747988] p0072 N73-13106
Specialized anthropometry requirements for protective-equipment evaluation
p0266 N73-23066
THOMAS, J. A.
Effect of training on coordinate determination of SLAR (Side-Looking Airborne Radar) imaged features
[AD-762342] p0371 N73-27979
THOMAS, J. G.
The nature of the optimum muscular performance achieved in the execution of fast eye rotations.
p0171 A73-24772
THOMPSON, A. J.
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342
THOMPSON, C. J.
Clinical applications of spectral analysis and extraction of features from electroencephalograms with slow waves in adult patients.
p0385 A73-41011
THOMPSON, E. A.
Training effectiveness evaluation of naval training devices. Part 1: A study of the effectiveness of a carrier air traffic control center training device
[AD-751556] p0141 N73-16101
THOMPSON, F. D.
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms.
p0115 A73-19124
THOMPSON, J. G.
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095
THOMPSON, R. F.
Biocybernetics: An interactive man-machine interface
[AD-746179] p0612 N73-11101
THORBURN, D. E.
Tactile Information Presentation (TIP)
[AD-761796] p0369 N73-27969
THOREN, P.
Left ventricular receptors activated by severe asphyxia and by coronary artery occlusion.
p0579 A73-10549
Reflex bradycardia elicited from left ventricular receptors during acute severe hypoxia in cats.
p0159 A73-23244

THORNE, R. G.
Pilot workload: A conceptual model
p0142 N73-17010
THORNTON, J. A.
Effect of mild acute hypoxia on a decision-making task.
p0247 A73-30514
THORP, J. W.
Neutron effectiveness for causing incapacitation in monkeys
[AD-742076] p0594 N73-10080
Blood PO2 and pH in monkeys after incapacitating doses of ionizing radiation
[AD-750681] p0109 N73-15134
THUM, K. W.
Computer-aided ECG analysis and research in a clinical setting.
p0059 A73-15648
THURSBY, W. R., JR.
Human factors evaluation of laser protective visors
[AD-751470] p0142 N73-16102
TIBBLIN, G.
Risk factors for developing myocardial infarction and other diseases - The 'Men born in 1913' study.
p0245 A73-30352
TIBERIO, U.
A method for studying the action of high-intensity electric fields on microorganisms
p0167 A73-24419
TIEFFENBACH, L.
The role of extrinsic vagal innervation in the motility of the smooth-muscled portion of the esophagus - Electromyographic study in the cat and the baboon
p0046 A73-13785
TIETZ, J. D.
Absolute motion parallax and the specific distance tendency.
p0234 A73-28096
TIGLIEVA, S. N.
Changes in the electrical activity of the brain and in some thermoregulation indices of nonanesthetized male cats during cooling
p0322 A73-36569
TIKHOMIROV, O. K.
Interaction between man and an electronic computer in operational planning
p0178 N73-18138
TIKHONOV, A. N.
Theoretical study of primary photosynthesis processes in higher plants and algae
p0425 A73-43707
TIKHONOV, M. A.
Respiration mechanics during weightlessness simulation in an immersion medium
p0124 A73-20986
Physiological criteria of early toxic normobaric hyperoxia manifestations
p0304 A73-34123
Mechanics of respiration during simulation of weightlessness in an immersion medium
p0135 N73-16053
Physical training as a method for preventing the hypodynamic syndrome
p0256 N73-22018
TIKHONOVA, G. P.
Evaluation of hazard presented by gas-off products from polymeric materials intended for use in space cabins.
p0329 A73-36931
TIKHVINSKAIA, N. I.
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
TIKHVINSKII, S. N.
Comparative evaluation of the general and specific efficiencies of athletes under normal barometric pressure and in the process of training and acclimatization under highland conditions of Pamir
p0584 A73-11925
TIMBAL, J.
Study of the heart rate of humans exposed to heat
p0331 A73-36942
Tolerance to immersion in cold water
p0331 A73-36943
Study of performances in a warm environment in case of air conditioning breakdown on a supersonic transport
p0331 A73-36947
TIMCHENKO, A. S.
Effect of the stimulation of nonspecific thalamic nuclei on spontaneous and evoked spindles in the auditory cortex
p0394 A73-41958
TIMOFEEVA, A. N.
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328
TIMOSHENKO, T. E.
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
TING, D.
Spline function interpolation in interactive hemodynamic simulation.
p0098 A73-18889
TIPS, J. H., JR.
Ocular effects of repetitive laser pulses
[AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097
TISHCHENKO, M. I.
Respiratory changes in the stroke volume of the left ventricle in healthy humans
p0345 A73-37397
Stroke volume measurement from an integral rheogram of human body
p0429 A73-44719
TISHCHENKO, V. V.
Mathematical description of certain properties of human sensitivity to vibration
p0580 A73-10659
Determination of performance precision and informativeness of electronic models of the sensory system of man
p0432 A73-44911
TISHLER, V. A.
Ways of enhancing the efficiency of physical exercise
p0280 A73-31515
Ways to increase effectiveness of physical training
p0263 N73-23039
TITOVA, L. K.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
TITUS, J. L.
Anatomy of the conduction system.
p0097 A73-18872
TIUNOV, L. A.
Action of Freon-114B2 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696
Influence of hypoxia on the release of certain gaseous wastes in white rats
p0304 A73-34228
The resistance of animals to toxic action of certain gases after adaptation to hypoxia
p0183 N73-19100
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101
Influence of certain radioprotectors on the ability of white rats to withstand acute hypoxia
p0211 N73-20059
The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness
p0215 N73-20087
Influence of hypoxia on elimination of some gaseous products of vital functions in white rats
p0372 N73-29025
TIUTIN, L. A.
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234

TIZUL, A. Y.
Cerebral hemodynamics during 120 day clinostatic hypokinesia
p0256 N73-22020
TKACHENKO, B. I.
Nerve mechanisms in the control of capacitance vessels
p0426 A73-43927
TKACHENKO, E. V.
Measurements of arterial pressure and of pressoreceptor reactions during prolonged pressure shifts in carotid arteries
p0429 A73-44720
TKACHENKO, N. M.
Relation between the frequency-amplitude characteristics of cerebral electrical activity and gonadotropic hormone excretion levels at various stages of ontogenesis
p0125 A73-21319
TOBIAS, C. A.
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus.
p0397 A73-42171
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space.
p0398 A73-42181
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space
[LBL-1011] p0186 N73-19134
TOBIAS, J. V.
Foundations of modern auditory theory. Volume 2.
p0243 A73-30276
Curious binaural phenomena.
p0244 A73-30285
Binaural processing of speech in light aircraft
[PAA-AM-72-31] p0102 N73-14094
Auditory effects of noise on air crew personnel
[FAA-AM-72-32] p0185 N73-19125
TOBIAS, S.
Test anxiety: Situationally specific or general
[AD-746453] p0066 N73-12104
TODD, P.
Cellular effects of heavy charged particles.
p0398 A73-42183
TOLGSKAIA, M. S.
Pathological effects of radio waves.
p0348 A73-37774
TOLOS, M. P.
The toxicity of pyrolysis products from a chlorotrifluoroethylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080
TOLSTOV, V. M.
Organization of the experiments and overall condition of the subjects
p0255 N73-22011
TOMASHCHENKO, I. S.
Use of oxygen for reducing the fatigue of man in flight
[JPRS-59041] p0264 N73-23051
TOMITA, T.
Light-induced potential and resistance changes in vertebrate photoreceptors.
p0161 A73-23313
The electroretinogram, as analyzed by microelectrode studies.
p0162 A73-23318
TOMLIN, P. J.
Computer simulation of gas exchange in human lungs.
p0278 A73-31348
TOMLINSON, G. A.
Studies on acid production during carbohydrate metabolism by extremely halophilic bacteria.
p0117 A73-19500
TONESK, X.
Normally expected aberrations in the 8-hour dynamic EKG
p0145 N73-17066
TONKOPII, V. D.
Analysis of the mechanism of the therapeutic action of pressurized oxygen in organic phosphorus poisoning
p0250 A73-30848
TOOMING, H. G.
Distribution of the long-wave radiation fluxes and the radiation balance in plant cover
p0378 N73-29322
TOPHILLER, D. A.
Human engineering computer aided design /HECAD/.
p0082 A73-16721
TORELLI, G.
Effect of hypothermia on renal sodium reabsorption.
p0391 A73-41623
TORNOEV, IU. V.
Origin of the external electric field detected near animals and men
p0166 A73-23942
TORREY, P. F.
Input noise approximation in tracker modeling
p0598 N73-10110
TOTSEVA, A. M.
Study of lymphocyte chromosome aberrations in human peripheral blood under in vitro exposures to 645-MeV protons and X-rays
p0280 A73-31517
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays
p0263 N73-23041
TOTSKII, V. M.
Effect of accelerations on the thiamine-S/35/ distribution in the organism of white mice
p0123 A73-20977
TOTSKIY, V. M.
Effect of accelerations on thiamine-S-35 distribution in the bodies of white mice
p0133 N73-16044
TOUCHSTONE, R. M.
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention.
p0283 A73-32394
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
TOURTELLOTTE, W. W.
The use of a battery of tracking tests in the quantitative evaluation of neurological function
p0599 N73-10118
TOWNSEND, P. M.
Stability of human sera collected for clinical chemistry determinations
p0143 N73-17053
Laboratory aspects of blood lipids
p0145 N73-17073
Some pitfalls of urine analysis
p0147 N73-17089
TOWNSEND, J. C.
Leave taking and overtime behavior as related to demographic, health, and job variables
p0143 N73-17055
Normally expected aberrations in the 8-hour dynamic EKG
p0145 N73-17066
The motivating influence of retest and repeated dietary counseling on cholesterol reduction
p0146 N73-17081
TRAHIOTIS, C.
Effects of signal duration and masker duration on detectability under diotic and dichotic listening conditions.
p0578 A73-10436
TRAUNER, D. A.
Adrenal influence on the supercompensation of cardiac glycogen following exercise.
p0200 A73-26121
TRAUTH, C. A., JR.
Estimating the number of terrestrial organisms on the moon.
p0203 A73-26488
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
TREDICI, T. J.
Idiopathic central serous retinopathy /choroidopathy/ in flying personnel.
[AD-754147] p0050 A73-14164
History, rationale, and verification of color vision standards and testing in the United States Air Force
p0179 N73-19069

TREFZGER, CH.
Did life originate in interstellar space
p0385 A73-41080
TREIER, V. N.
Determination of the optimal time of continuous work for operators in man-machine systems
p0157 A73-22849
TRENKLE, J. J.
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987
TRESANSKY, G. J.
The NMRI Mark 3 Mod 1 tremor device
[AD-763343] p0438 N73-32010
TREZEK, G. J.
Predictions of the dynamic response of the lung.
p0116 A73-19477
TRIASKOV, A. A.
Vein wall changes as the main cause of acute disturbance of blood circulation in the Vena centralis retinae system
p0277 A73-31173
Fluorescent angiographic technique for fundus oculi
p0425 A73-43788
TRIBEL, S.
The selection and surveillance of student pilots with motion sickness in the Belgian Armed Forces
p0226 N73-21099
TRIFONOV, E. N.
Dependence of poly U-directed cell-free system on ratios of divalent and monovalent cations.
p0090 A73-17945
TRIFONOV, IU. A.
Local resistance variations caused by membrane potential shifts in the interior of the horizontal retina cell
p0435 A73-45250
TROELSTRA, A.
Some engineering aspects of clinical electroretinography.
p0310 A73-35359
TROIANSKII, N. S.
Safety measures in aviation industry
p0312 A73-35869
TROITS'KII, G. V.
Protein conformation in a living organism
p0057 A73-14822
TROJABORG, W.
Simultaneous recording of acceleration and brain waves.
p0242 A73-29995
TROLLIP, S. R.
Computer-assisted instruction in pilot training and certification.
p0082 A73-16724
TROSHIKHIN, G. V.
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
Thermoregulatory reactions of animals in a helium-oxygen medium
p0088 A73-17695
Thermoregulatory reactions of rats in a nitrogen and helium-diluted hypoxic atmosphere
p0123 A73-20979
Heat regulation reactions in animals in a helium-oxygen atmosphere
p0065 N73-12096
Heat regulation reactions in rats in a hypoxic atmosphere with nitrogen and helium dilution
p0134 N73-16046
Gas exchange and electrical activity of the skeletal musculature of animals in a helium and oxygen medium
p0182 N73-19093
TROTTER, J.
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070
TROYANSKIY, M. P.
Hygienic problems of the effect of microwave electromagnetic fields on the body
[JPRS-57209] p0593 N73-10073
TRUBACHEV, V. V.
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445
TRUJILLO-CENOZ, O.
The structural organization of the compound eye in insects.
p0160 A73-23302
TRUJILLO, R.
New formaldehyde base disinfectants.
p0424 A73-43276
TRUJILLO, R. E.
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
TRUKHINA, L. V.
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
TRUKHINA, N. V.
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
TRUMPER, M. G.
A flight test programme to study the effects of environmental stresses on aircrew operating military strike aircraft
p0188 N73-19145
TRUNOV, O.
Problems of the interior design of passenger cabins
p0163 A73-23687
TRUSHINA, M. N.
A study of the radioprotective action of a polymer salt of cystamine and sulphopropyl ester of dextran
[DRIC-TRANS-2963] p0108 N73-15125
TSAKIRIS, A. G.
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry.
p0348 A73-37795
TSEITLIN, L. A.
Transglucosidase activity of heart-muscle per-glucohydrolase
p0125 A73-21136
TSELNIKER, Y. L.
Distribution of photosynthetically active radiation in the open and in the forest under various weather conditions
p0378 N73-29329
Measurements of the photosynthetically active radiation in forests with an intensity meter
p0379 N73-29337
TSEPKOV, G. V.
Recorder of a prescribed number of pulses
p0580 A73-10663
TSETLIN, V. M.
Investigation of gas sorption and desorption in polymer materials in the process of gaseous sterilization of such materials
p0087 A73-17681
Polyurethane foam sterilization by the gas method.
p0395 A73-42160
TSIEN, R. W.
The repolarization process of heart cells.
p0197 A73-25593
TSIRUL'NIKOV, E. M.
Investigation of cutaneous sensibility by focused ultrasound
p0080 A73-16695
TSIRUL'NIKOV, V. A.
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623
TSIRULIS, T. P.
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
TSITOVICH, S. I.
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
TSUCHIDA, Y.
Technical improvements in radiotelemetering of the electrocardiogram.
p0053 A73-14293

Luminance-duration relationship in the human ERG.
p0237 A73-28363
TSUKERMAN, V. A.
Investigation of cutaneous sensibility by focused ultrasound
p0080 A73-16695
TSVETKOVA, I. V.
Effect of the frequency of changing the nutrient solution on productivity of plants cultivated on keramzit
p0183 N73-19106
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method
p0184 N73-19110
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion
p0184 N73-19111
TSVETKOVA, N. F.
Ergonomics research methods
p0414 N73-30086
TUCKER, A.
Relationship between organ weight and blood flow in rats adapted to simulated high altitude.
p0387 A73-41156
TUCKER, P. E.
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
TUCKER, R. D.
Human perception of moderate strength low frequency magnetic fields.
p0392 A73-41789
TUCKER, R. J.
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
TULIS, J. J.
Formaldehyde gas as a sterilant.
p0288 A73-33694
TULUNAY-KEESEY, U.
Stabilized target visibility as a function of contrast and flicker frequency.
p0308 A73-34846
TUMAKOVA, N. M.
Contributions of quick and slow muscle fibers to changes in the electrical activity of skeletal muscles in rats under acute and chronic effects of cold
p0126 A73-21323
TUNA, N.
Cardiac dysrhythmias associated with exercise stress testing.
p0043 A73-13544
TUNNER, W.
A device for the continuous measurement of subjective changes
p0285 A73-33090
TUPPER, R. M.
Orientation specificity and response variability of cells in the striate cortex.
p0346 A73-37421
TUREK, Z.
Myoglobin distribution in the heart of growing rats exposed to a simulated altitude of 3500 m in their youth or born in the low pressure chamber.
p0251 A73-30910
Hypoxic pulmonary steady-state diffusing capacity for CO and cardiac output in rats born at a simulated altitude of 3500 m.
p0251 A73-30911
Advantage or disadvantage of a decrease of blood oxygen affinity for tissue oxygen supply at hypoxia - A theoretical study comparing man and rat.
p0390 A73-41620
TURK, M. A.
An analysis of blood flow.
p0042 A73-13302
TURKIN, V. M.
Dosimetry of space radiations
p0173 N73-18100
TURNER, H. S.
The interaction of infrared radiation with the eye: A review of the literature
[NASA-CR-128407] p0591 N73-10064
Human responses to electricity: A literature review
[NASA-CR-128422] p0592 N73-10065
TURNEY, S. Z.
Heated Fleisch pneumotachometer - A calibration procedure.
p0127 A73-21509
TURSUNOV, Z. T.
Mutual relationship of water and salt secretion functions in digestive and excretory organs under conditions of high temperature
p0390 A73-41438
TWELL, R.
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133
TYC-DUMONT, S.
The neuronal mechanism of nystagmus.
p0316 A73-36437
TYDEN, G.
Gravitational stress and exercise.
p0313 A73-35980
TYLER, C. W.
Stereoscopic vision - Cortical limitations and a disparity scaling effect.
p0312 A73-35922
TYLER, D. M.
Monitoring performance across sense modes - An individual differences approach.
p0093 A73-18244
TYLER, J. M.
Effects of hyperinflation of the thorax on the mechanics of breathing.
p0400 A73-42415
TYLER, P. E.
Overview of the biological effects of electromagnetic radiation.
p0240 A73-29211
TYROLER, H. A.
Relationship between ventricular premature contractions on routine electrocardiography and subsequent sudden death from coronary heart disease.
p0242 A73-30051
TYURIN, Y.
Spaceflight safety
[JPRS-58781] p0232 N73-21149
TYUTIN, L. A.
Effect of accelerations on reactivity of the gastro-intestinal tract to pharmacological agents
p0181 N73-19085
Influence of certain radioprotective preparations on the motor-evacuatory function of the gastrointestinal tract of healthy and irradiated rats
p0212 N73-20062
Certain methods of prophylaxis of radiation sickness
p0214 N73-20078
Excretion of free amino acids with the urine as a test for early diagnosis of radiation damage
p0215 N73-20092
The effect of some radioprotective preparations on the motor and evacuator function of the gastrointestinal tract of healthy and irradiated rats
[DRIC-TRANS-2962] p0229 N73-21130
Effect of decompression of the lower half of the body on the condition of the human cardiovascular system (based on X-ray kymography data)
p0373 N73-29032
TYVES, L. I.
Features of the kinematics of manipulators and volumes methods
p0335 N73-26075
TZIVONI, D.
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492

U

UCHIDA, R.
Multi-information recording and reproduction in the ultrasono-cardio-tomography.
p0239 A73-28581
UPLIAND, IU. M.
Reflex arch lability determination
p0401 A73-42659

UGLOVA, N. N.
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Investigation of some blood indices in white rats exposed to sixty day hypokinesia
p0262 N73-23026
UGRIUMOVA, G. A.
Study of myocardial antigen localization using the immunofluorescence method
p0278 A73-31392
UKSHE, A. N.
Influence of certain radioprotectors on the ability of white rats to withstand acute hypoxia
p0211 N73-20059
The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness
p0215 N73-20087
ULANOVA, A. M.
Auto-antibodies of an irradiated organism
p0060 A73-15711
ULASHCHIK, V. S.
Investigation of the influence of biologically active substances on the permeability of the skin
p0277 A73-31174
ULLIOT, D. J.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661
ULOGOV, A. V.
Miniature four-channel radiotelemetry system for the transmission of cerebral biopotentials
p0093 A73-18167
ULRICH, W. D.
Acoustic-optical detection of decompression sickness in hamsters
[AD-743475] p0595 N73-10091
ULVEDAL, F.
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
UMALI, T.
Ribonucleic acid /RNA/ polymerase and adenyl cyclase in cardiac hypertrophy and cardiomyopathy.
p0404 A73-42687
UMEMO, I.
The evolution of lignin - Experiments and observations.
p0241 A73-29649
UMRIKHINA, A. V.
Abiogenic formation of porphin, chlorin and bacteriochlorin.
p0090 A73-17934
URMANCHEEVA, T. G.
Functional characteristics of the hippocampus in lower monkeys
p0167 A73-24330
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140
URVAYEV, U. V.
Features of the behavior of dogs when given a choice of various reinforcements
p0449 N73-33066
USACHEV, V. V.
Functional changes in the systemic and regional /intracranial/ circulation during low value accelerations
p0208 A73-27714
Certain features of hemodynamics during orthostatic tests with persons of different vestibulo-vegetative tolerance levels
p0305 A73-34236
Functional changes in systemic and regional (intracranial) circulation accompanying low accelerations
p0217 N73-20108
Some characteristics of hemodynamics in an orthostatic test for persons with different vestibular-autonomic tolerance
p0373 N73-29034
USAKOVA, N. A.
Role of peripheral chemoreceptors in reactions of rats to short and lasting hypoxia
p0249 A73-30840
USIK, P. I.
Continual mechanochemical model of muscular tissue
p0381 A73-40182
USIK, S. V.
Urea content variations in blood and tissues during muscular activity in relation to the adaptation level of the organism
p0402 A73-42660
USPENSKIY, S. I.
Ergonomics research methods
p0414 N73-30086
USSELMAN, L. B.
Biomedical instrumentation and measurements.
p0312 A73-35860
UTEN'KIN, A. A.
Anisotropy of compact bone material
p0045 A73-13744
UTHER, J. B.
Assessment of left ventricular performance in man - Instantaneous tension-velocity-length relations obtained with the aid of an electromagnetic velocity catheter in the ascending aorta.
p0281 A73-31996
UTLEY, J. R.
Measurement of cardiac output with and organ trapping of radioactive microspheres.
p0324 A73-36661
UTTAL, W. R.
A minor perturbing effect of retinal locus on dot pattern recognition - Rejection of a possible artifact.
p0588 A73-12524
UTZ, G.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Gas mixing during inspiration.
p0323 A73-36652
UUSITALO, R.
Functional dependence of the ciliary epithelium ATPase activity and intraocular pressure on the autonomic nervous system.
p0078 A73-16248
UZUNIAN, L. A.
Emotional overstress effects on the indices of the blood coagulation system in monkeys
p0249 A73-30846

V

VACHERON, A.
Measurement of coronary blood flow by radiocardiography - Study of 116 cases.
p0405 A73-42838
VAINERMAN, L. I.
Certain aspects of the bionic analysis and control of dynamic systems
p0580 A73-10658
VAKAR, M. I.
Carbon monoxide content in the exhaled air and carboxyhemoglobin in the blood of subjects equipped with an isolating protective garment
p0208 A73-27712
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
VALATX, J. L.
Sleep and cerebral temperature in the rat during the chronic exposure to a hot environment
[NASA-TT-F-15082] p0417 N73-30994
VALCIUKAS, J. A.
Quantitative studies on optokinetic nystagmus in the monkey.
p0318 A73-36459
VALDES, P.
Symmetry of the visual evoked potential in normal subjects.
p0385 A73-41012
VALEEV, U. S.
Origin of the external electric field detected near animals and men
p0166 A73-23942

VALENTINUZZI, M.
On the electronic simulation of acceleratory nystagmus. p0403 A73-42683
VALENTINUZZI, M. E.
The use of a compartmental hypothesis for the estimation of cardiac output from dye-dilution curves and the analysis of radiocardiograms. p0115 A73-19124
VALINAKI, M.
Development and reversibility of pulmonary oxygen poisoning in the rat. p0247 A73-30516
VALLOTTON, W. C.
An anthropomorphic master-slave manipulator system. p0344 A73-37316
VALVERDE, H. H.
Evaluation of a device to train forward air controllers to communicate target locations [AD-751292] p0142 N73-16103
VAN ACKEREN, G.
Correlation between the regional distribution of sweating and the deviation from the 'Predicted 4-hr Sweat Rate' /P4SR/ p0041 A73-13122
VAN BEAUMONT, W.
Changes in total plasma content of electrolytes and proteins with maximal exercise. p0127 A73-21507
Red cell volume with changes in plasma osmolarity during maximal exercise. p0324 A73-36654
Effects of rehydration on +Gz tolerance after 14-days' bed rest. p0425 A73-43524
Erythrocyte volume in acidified venous blood from exercising limbs. p0436 A73-45557
VAN BUSKIRK, W. C.
Biomechanics of the semicircular canals. p0315 A73-36430
A non-Newtonian model for fluid flow in the semicircular canals. p0315 A73-36431
VAN DE WOESTIJNE, K. P.
A physical model of expiration. p0577 A73-10169
Peak expiratory flow rate and rate of change of pleural pressure. p0391 A73-41636
VAN DEN AKKER, A. J.
Single to seven channel lightweight biotelemetry system. p0052 A73-14281
VAN DER HERDEN, J. J. J. M.
Ocular antigens. IV - A comparative study of the localisation of immunogenic determinants of ocular structural glycoproteins in connective tissues of various organs. p0392 A73-41729
VAN HASSELT, P.
The centrifugal control of retinal function. p0242 A73-29875
VAN HOUTE, O.
An epidemiological survey of risk factors for ischemic heart disease in 42,804 men. I - Serum cholesterol value. p0059 A73-15521
VAN KIRK, D.
Digital computer diagnosis of cardiac arrythmias in a single-lead electrocardiogram. p0306 A73-34533
VAN LIERE, E. J.
Regression of altitude-produced cardiac hypertrophy. p0433 A73-45065
VAN LITH, G.
Local scotopic responses in ERG and VER. p0237 A73-28361
VAN TAM, H.
Effect of stimulation of certain hypothalamic structures on systemic and pulmonary circulation p0382 A73-40282
VANBEAUMONT, W.
Objective evaluation of cutaneous thermal sensivity [NASA-CR-114564] p0150 N73-17113
VANCHERI, F.
Development of system design information for carbon dioxide using an amine type sorber [NASA-CR-111849] p0420 N73-31018
VANCOTT, H. P.
Human engineering guide to equipment design (revised edition) [AD-758339] p0296 N73-24140
VANDECASTEELE, J. M.
Standardization of test and categorization of color vision anomalies in military circles, and methods used by employees to track down their problems p0179 N73-19071
VANHUISE, V. J.
Comparison of plethysmographic and electromagnetic flow measurements. p0427 A73-44215
VANKELEVICH, V. I.
Assessment of thermal insulation properties of clothing [DRIC-TRANS-2921] p0113 N73-15166
VANNEETEREEN, A.
Calculations on the optical modulation transfer of the human eye for white light [IZF-1973-2] p0264 N73-23047
VANNOTTI, A.
Human calorimeter with a new type of gradient layer. p0324 A73-36662
VANOSCH, P. M. M.
Summaries, biological effects of microwave radiation, part 5 [NBL-1972-5] p0591 N73-10060
Summaries, biological effects of microwave radiation, part 6 [NBL-1972-6] p0591 N73-10061
Biological effects of microwave radiation, part 1 [NBL-1971-7-PT-1] p0264 N73-23048
VANPATTEN, R. E.
Performance measurement using pilot controlled Gz maneuvering with simulated operational task [AMRL-TR-72-3] p0189 N73-19154
VANSTEE, E. W.
Special aspects of aviation occupational medicine. Cardiovascular and nervous system effects of bromotrifluoromethane [AGARD-R-599] p0149 N73-17106
VARDON, G.
Recording of second time derivative of displaced volume V in breathing. p0159 A73-22937
VARENE, P.
Energy balance during moderate exercise at altitude. p0277 A73-31343
VARENTSOV, IU. M.
Changes in cerebral circulation under the influence of vasodilating agents p0239 A73-29074
VARGHESE, P. J.
Alternative mechanisms of apparent supernormal atrioventricular conduction. p0165 A73-23843
VARGO, D. J.
Ophthalmic method and apparatus [NASA-CASE-LEW-11669-1] p0339 N73-27062
VARLAMOV, V. P.
Use of products of biological mineralization for cultivation of higher and lower autotrophs p0184 N73-19109
VARNEY, J. R.
Telemetry experiments with a hibernating black bear [NASA-CR-133926] p0418 N73-31000
VARTANIAN, G. A.
Ontogenesis of cerebrospinal reflex activity p0121 A73-20366
VARTANIAN, I. A.
Inferior colliculus neuron responses to an amplitude-modulated signal with varying intensity levels p0435 A73-45248
VARTBARONOV, R. A.
Change in the capacity of man to withstand transverse stresses after hypodynamia of varying duration p0181 N73-19083
Investigation of the possibility of recording the human electroencephalogram under the influence of muscle noise p0443 N73-33025
VAS, R.
Measuring characteristics of the displacement cardiograph. p0403 A73-42676

VASADZE, G. SH.
Automatic methods for smoothing and separation of characteristic points in an electrocardiographic signal
p0245 A73-30387
VASCULESCU, T.
The effect of low X-ray doses on the central nervous system
p0427 A73-44179
VASECHKO, T. V.
Analysis of evoked, initially electronegative potentials
p0276 A73-31159
VASHKOV, V. I.
Polyurethane foam sterilization by the gas method.
p0395 A73-42160
Study of a method of conservation of urine relative to spaceflight conditions
p0184 N73-19112
VASIL'EV, A. G.
Characteristics of the electrical activity of the superior olivary bodies of Vespertilionidae and Rhinolophidae bats in response to ultrasonic stimuli of different frequencies
p0170 A73-24596
VASIL'EV, P. V.
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
VASIL'EV, V. G.
Effect of stepwise adaptation to high-mountain areas on the respiratory function and the acid-alkali equilibrium of blood in subjects with different motor activity stresses
p0305 A73-34232
VASIL'EVA, V. M.
Physiological nature of the electroencephalographic and vegetative components of human conditioned reactions
p0206 A73-27107
VASILENKO, D. A.
Cortico- and rubrofugal activation of interneurons forming propriospinal paths in the dorsolateral funiculs of the cat spinal cord
p0118 A73-20002
VASILETS, I. M.
Quaternary structure /subunit composition/ of human ceruloplasmin
p0198 A73-25638
VASILEV, A.
Contrast sensitivity near borders - Significance of test stimulus form, size and duration.
p0204 A73-26716
VASILEVSKII, N. N.
Stable frequency and synchronicity alterations in the discharges of cortical neuron populations in feedback experiments
p0582 A73-11445
VASILIEV, G. A.
The resistance of animals to toxic action of certain gases after adaptation to hypoxia
p0183 N73-19100
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101
Influence of certain radioprotectors on the ability of white rats to withstand acute hypoxia
p0211 N73-20059
The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness
p0215 N73-20087
VASILIEV, P. V.
Reactivity of an organism in conditions of prolonged spaceflight
p0180 N73-19078
Effect of accelerations on reactivity of the gastro-intestinal tract to pharmacological agents
p0181 N73-19085
Problems of Space Biology. Volume 15: Functional morphology during extremal actions
[NASA-TT-F-738] p0185 N73-19126
Joint effect of stimulators and tranquilizers on performance of a man-operator
p0256 N73-22021
Problems of space biology. Volume 17: Pathophysiological bases of aviation and space pharmacology
[NASA-TT-F-736] p0257 N73-22033
Investigation of some blood indices in white rats exposed to sixty day hypokinesia
p0262 N73-23026
VASILYEV, V. G.
Influence of stepped adaptation to high-mountain conditions on the respiratory function and acid-alkali equilibrium in the blood during different motor activity regimes of subjects
p0372 N73-29030
VASILYEVA, T. D.
Changes in cerebral, pulmonary and peripheral blood circulations
p0255 N73-22012
VASIN, M. V.
Chemical protection in mixed gamma-neutron irradiation with different neutron contributions in the absorbed dose
[DRIC-TRANS-2961] p0108 N73-15124
Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061
Antiradiation effectiveness of cystamine under various conditions of gamma irradiation
p0212 N73-20067
Chemical protection against mixed gamma-neutron radiation with various contributions of neutrons to the absorbed dose
p0212 N73-20068
Influence of gamma radiation on the elimination of the toxic effect of cystamine
p0213 N73-20070
Effect of shielding the stomach on the frequency of chromosomal aberrations in the cells of the marrow of guinea pigs and rats with gamma-irradiation at doses of 50-200 r
p0213 N73-20074
VASIN, N. IA.
Role of specific and nonspecific thalamic nuclei in the genesis of certain slow rhythms on the human electrocorticogram
p0348 A73-37939
VAULINA, E. N.
Gravity, weightlessness and organismic genetic structures.
p0313 A73-35923
Survival and mutability of Chlorella under various orientation in the earth's gravitational field.
p0314 A73-35997
Effect of dynamic factors of space flights on green alga Chlorella vulgaris.
p0314 A73-36098
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168
Effects of space flight factors on Drosophila.
p0397 A73-42173
VAUZELLE, A.
Results of carbon monoxide poisoning checks following aviation accidents or incidents in the French Army
p0329 A73-36929
Hepatic lesions observed among flight crews following aviation accidents
p0330 A73-36933
VAVILKINA, G. A.
Peculiarities of human skin reactions to lotions of different composition during hypokinesia
p0444 N73-33034
VAYSFELD, I. L.
Diurnal rhythm of the content of biogenous amines (histamine, serotonin) in human blood under normal conditions and during altered work-sleep cycles
p0064 N73-12089
VEISFEL'D, I. L.
Daily rhythm of biogenetic amine /histamine and serotonin/ contents in human blood during usual and shifted work schedules
p0087 A73-17688
VEJBY-CHRISTENSEN, H.
Effect of body temperature on ventilatory transients at start and end of exercise in man.
p0275 A73-31127
VEKSHINA, N. L.
Regional serotonin content variations in the brain of cats during a prolonged absence of sleep

p0345 A73-37394
VELASQUEZ, T.
Influence of developmental adaptation on aerobic capacity at high altitude.
p0158 A73-22928
VELLER, I. A.
Possibilities of barotherapy in ophthalmology
p0383 A73-40349
VENDA, V. F.
Research principles and the construction of mnemonic diagrams
p0414 N73-30083
VENDRIK, A. J. H.
Analysis of the response characteristics of optic tract and geniculate units and their mutual relationship.
p0586 A73-12162
Eye movements necessary for continuous perception during stabilization of retinal images.
p0318 A73-36461
VENGEL, Y.
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems
p0255 N73-22008
VENKETESWARAN, S.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
Development of germ-free plants and tissue culture
[NASA-CR-128947] p0293 N73-24122
VENSLAUSKAS, M. I.
Investigation of the geometry of the dendritic tree of retinal ganglion cells
p0349 A73-37944
VERA, Z.
Identification of the sites of atrioventricular conduction defects by means of His bundle electrography and atrial pacing.
p0319 A73-36522
VERBERNE, G.
Telemetered EEG and neuronal spike activity in olfactory bulb and amygdala in free moving rabbits.
p0054 A73-14299
VERDECCHIA, A.
A program for automatic analysis of biological parameters
[ISS-72/4] p0186 N73-19128
VERDOON, P. D.
Clinical evidence of cardiac weakness and incoordination secured by simultaneous records of the force BCG and carotid pulse derivative and interpreted by an electrical analogue.
p0159 A73-23174
VERGILES, N. IU.
Formation of visual images. Studies of stabilized retinal images /revised edition/.
p0406 A73-42869
VERNIK, A. IA.
Effect of chronic pyramid insufficiency on the function of spinal centers of shin and foot muscles in man
p0401 A73-42658
VERNIKOS-DANELLIS, J.
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Dissociation of effects of prolonged confinement and bedrest in normal human subjects: Heart rate and body temperature
p0175 N73-18113
Dissociation of effects of prolonged confinement and bed rest in normal human subjects; cortisol, insulin, thyroxine, and triiodothyronine
p0175 N73-18114
VERNOT, E. H.
Continuous animal exposure to dichloromethane
[AD-746295] p0611 N73-11088
Continuous exposure of animals to methylisobutylketone
[NASA-TM-X-69100] p0177 N73-18130
Toxic Hazards Research Unit annual technical report, 1972
[NASA-CR-131675] p0259 N73-22043
VERNOV, S. N.
Radiation doses during a prolonged orbital space flight about the earth
p0242 A73-29867
VEROSTKO, C. E.
SMEAT atmosphere trace contaminants.
[ASME PAPER 73-ENAS-45] p0351 A73-37992
VESELOVA, E. S.
Human forearm-muscle blood supply regimes after 'static' exercise with increasing stress
p0169 A73-24522
VESELOVA, E. V.
Mechanism of working hyperemia condition alteration in the forearm muscles of man under increased loads
p0322 A73-36570
VETTER, W. R.
A study of ventricular contractility and other parameters possibly related to vasodepressor syncope
[NASA-CR-128968] p0333 N73-26056
VETTES, B.
Cardiovascular reactions of a healthy man exposed to sonic booms
p0327 A73-36909
VETU, E.
New method of stimulation for the study of photoreceptors.
p0237 A73-28362
VEYN, A. M.
Pathology of the brain and the structure of nocturnal sleep
p0257 N73-22024
VEYRAT, C.
Non-invasive technique for diagnosing atrial septal defect and assessing shunt volume using directional Doppler ultrasound - Correlations with phasic flow velocity patterns of the shunt.
p0583 A73-11505
VICKERS, D. L.
Sorcerer's Apprentice - Head-mounted display and wand.
p0344 A73-37323
VIDAL, J. J.
New developments in EEG signal processing.
p0058 A73-15279
VIDYASAGAR, T. R.
The role of colour perception and 'pattern' recognition in stereopsis.
p0121 A73-20266
VIEVS'KII, M. A.
Functional state of various portions of the cerebrum under the action of extremal stimulation
p0084 A73-16736
VIGHATI, L.
The toxicity of pyrolysis products from a chlorotrifluoroetyhylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080
VIKHLIAEV, IU. I.
Effect of adaptation to altitude hypoxia on the behavior of animals in a conflict situation
p0428 A73-44549
VIL-VILYAMS, I. F.
Human cardiovascular system reactions to sign variable transverse accelerations
p0064 N73-12088
VIL'-VIL'IAMS, I. F.
Cardiovascular system reactions to alternating transverse accelerations in man
p0087 A73-17687
VILKINA, G. A.
Chemical protection from genetic damages induced by radiation in the period of aftereffect of acceleration.
p0384 A73-40815
VILLAFANA, C.
The value of continued followup in a preventive medicine program
p0145 N73-17072
The motivating influence of retest and repeated dietary counseling on cholesterol reduction
p0146 N73-17081
The management of chronic disease: A study of employee morbidity and mortality at the NASA, Goddard Space Flight Center, 1966 - 1971
p0147 N73-17086
VINCENT-FALQUET, J.-C.
Energy supply in acute cold-exposed dogs.
p0324 A73-36655

VINITSKAIA, R. S.
Determination of diffusive capacity components in lungs and of alveoloarterial oxygen gradients for the estimation of oxygen transport conditions in lungs
p0250 A73-30849
VINJE, E. W.
Comparison of human operator critical tracking task performance with aural and visual displays.
p0130 A73-21667
Human operator dynamics for aural compensatory tracking
p0602 N73-10142
VINNIKOV, Y. A.
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization
[NASA-TT-F-720] p0220 N73-20128
VINOGRADOV, I. B.
Features of the kinematics of manipulators and volumes methods
p0335 N73-26075
VINOGRADOV, L. A.
Effect of hypodynamia and other spaceflight factors on the excretion of 17-hydroxycorticosteroids and aldosterone
p0373 N73-29031
VINOGRADOV, Y. A.
Life support systems of spacecraft
[NASA-TT-F-14436] p0604 N73-10155
VINOGRADOVA, L. A.
Effects of the hypodynamics and other factors of a spaceflight on the excretion of 17-oxycorticosteroids and aldosterone
p0305 A73-34233
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019
VINOGRADOVA, N. N.
Diurnal rhythm of a corticosteroid reaction to ACTH and physical load
p0249 A73-30841
VIRMANI, Y. P.
Spin-labeling studies on the membrane of a facultative thermophilic bacillus.
p0119 A73-20027
VIRU, A. A.
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
VIRU, E. A.
Interrelations among the suprarenal gluco-corticoid activity, the cardiovascular systems, and the electrolyte metabolism during prolonged work
p0199 A73-26085
VISHNIAC, W. V.
Antarctica as a Martian model.
p0396 A73-42162
VISSER, K. R.
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217
VISSOULIS, H. G.
Management of asymptomatic carriers of Hepatitis-Associated-Antigen (HAA) in Hellenic Air Force personnel
p0265 N73-23060
VITOLS, I.
Fluorometric 11-hydroxy-corticosteroid assay in human blood plasma
[NASA-TT-F-15092] p0416 N73-30990
VLADIMIROV, A. D.
Methods of studying eye movements
p0283 A73-32417
VLASOV, V. B.
Role of extracardial innervation in compensation of an orthostatic load
p0443 N73-33023
VLIERS, A. C. A. P.
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217
VLODAVER, Z.
Pathology of angina pectoris.
p0085 A73-17276
VNUKOV, V. A.
Physical model selection for the balance preservation system in man
p0431 A73-44903
Dynamics of the balance preservation system of man
p0432 A73-44909
VOEGELI, F.
Multichannel telemetry of physiological parameters /body temperature ecg, eeg/ in the rat. I - Design and methods.
p0054 A73-14305
VOGEL, J. A.
Central, femoral, and brachial circulation during exercise in hypoxia.
p0127 A73-21506
Effects of acute alterations of maximum oxygen consumption on endurance capacity of men.
p0241 A73-29753
VOGT, J. J.
Motor, thermal and sensory factors in heart rate variation - A methodology for indirect estimation of intermittent muscular work and environmental heat loads.
p0250 A73-30880
VOGT, L.
Interrelationship between gravity and mechanical impedance of supine humans
p0368 N73-27963
VOICHISHIN, K. S.
Determination of the information-forecasting indices of biometeorological phenomena
p0239 A73-28861
VOINOV, Y. P.
Assessment of the thermal resistance of clothing
[DRIC-TRANS-2920] p0067 N73-12117
VOL'KENSHTEIN, A. V.
Biology and physics
p0281 A73-31823
VOLKOV, B. N.
A rapid method for determining the CO2 transport characteristics in man by using a capnograph and a multichannel respirator
p0402 A73-42665
VOLKOV, I. O.
Changes in respiration accompanying a diencephalic vegetative-vascular syndrome under the action of a hypoxic mixture
p0382 A73-40280
VOLKOV, L. V.
Determination of the type of higher nervous activity from the aftereffect characteristics of multidimensional stimuli
p0322 A73-36577
VOLKOV, N. N.
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
VOLOGODSKII, A. V.
Theory of cooperative defect formation in a biopolymer molecule under the action of radiation
p0198 A73-25637
VOLOKHOVA, N. A.
Vestibular reactions methods of study and the effects on various environmental factors
[AD-753511] p0220 N73-20132
VOLOSEVICH, R. M.
Use of sodium hydrocarbonate for medication and prophylaxis of motion sickness
p0124 A73-20990
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057
VOLOSHIN, M. IA.
Anatomic and functional organization of the

ventral anterior and reticular nuclei of the thalamus
p0429 A73-44675

VOLOSHIN, V. G.
Changes in cardiac activity and in the latter's phase structure during decompression of the lower half of the body
p0280 A73-31513
Influence of lower-body decompression on the state of the human cardiovascular system /according to roentgenokymographic data/
p0305 A73-34234
Change in cardiac activity and its phase structure during lower body decompression
p0263 N73-23037
Effect of decompression of the lower half of the body on the condition of the human cardiovascular system (based on X-ray kymography data)
p0373 N73-29032

VOLOVICH, V. G.
Medical aspects of the safe descent and landing of a spacecraft on the earth and other celestial bodies
[NASA-TT-F-15047] p0376 N73-29053

VOLOZHIN, A. I.
Investigation of some blood characteristics in albino rats subjected to 60-day hypokinesia
p0279 A73-31502
Investigation of some blood indices in white rats exposed to sixty day hypokinesia
p0262 N73-23026

VOLYNKINA, G. IU.
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328

VOLYNSKIY, B. G.
Characteristics of the action of medicinal preparations under hypothermic conditions
p0212 N73-20064

VOLZ, P. A.
Space-related research in mycology concurrent with the first decade of manned space exploration.
p0357 A73-39478
Microbial response to space environment, part B
p0232 N73-21762
Mycological studies housed in the Apollo 16 microbial ecology evaluation device
p0292 N73-24110

VON BERNUTH, G.
Temporal sequence of right and left atrial contractions during spontaneous sinus rhythm and paced left atrial rhythm.
p0199 A73-25699

VON GIERKE, H. E.
Biodynamic applications regarding isolation of humans from shock and vibration.
p0406 A73-42926

VON HOFSTEN, C.
Visual perception of motion in depth - Application of a vector model to three-dot motion patterns.
p0234 A73-28091

VON NIEDING, G.
Effect of acceleration on distribution of lung perfusion and on respiratory gas exchange.
p0381 A73-40274

VON ROSENBERG, D. U.
A distributed parameter model of the inertially loaded human spine.
p0315 A73-36429

VON SCHNAKENBURG, K.
Results of electron microscopic studies in the rat brain under oxygen at high pressure.
p0195 A73-25330

VON SEELEN, W.
Information processing in the visual system.
p0122 A73-20374

VON WIESER, S. F.
Operating a head-up display.
p0581 A73-11012

VONBAUMGARTEN, R. J.
Responses of blind fish to gravitational changes as achieved in parabolic flight
p0226 N73-21101

VONDIRINGSHOFEN, H.
The effects of the hydrostatic pressure of the water bath on the capillary blood pressure and on the dehydration of the connective tissue
[NASA-TT-F-14894] p0265 N73-23052

VONWOLFFRADT, G. S.
The USAF aircraft maintenance manpower process: 1947 through 1972
[AD-760082] p0337 N73-26097

VOROBYEV, L. N.
Effect of Coriolis acceleration on the vestibular apparatus of a cosmonaut and its experimental study in the laboratory
[NASA-TT-F-15129] p0417 N73-30993

VOROBYEV, Y. I.
Kinematic analysis of spatial slave mechanics for manipulators by the matrix method
p0335 N73-26077

VORONEZHTSEV, V. V.
A study of the statistical patterns of visual perception of a black and white raster image
p0385 A73-40861

VORONIN, G.
Life support systems of spacecraft
[NASA-TT-F-14436] p0604 N73-10155

VORONIN, L. G.
Emotional stimulation traces in the spectra of EEG and cutaneo-galvanic reaction of man under normal conditions and in the case of memory impairment
p0206 A73-27106
Reinforcement of unconscious traces of stimuli in the human being during ontogenesis
p0343 A73-37251

VORONIN, V. A.
Action of Freon-11482 on the activity of lactate-dehydrogenase iso-enzymes
p0088 A73-17696

VORONKOV, G. S.
Short-term latent reactions of the lateral geniculate body neurons in the rat to electrical stimulation of the optical tract
p0170 A73-24595

VORONKOVA, L. V.
Synthesis of minimized formal neurons by means of magnetic current switches
p0431 A73-44902

VOROSHILOV, M. S.
An analytical method for the synthesis of reversible follow-up systems
p0336 N73-26083

VOROZHTSOVA, S. V.
The radiobiological effects of heavy ions on mammalian cells and bacteria.
p0398 A73-42182

VOS, J. A.
Biotelemetry; Proceedings of the International Symposium, Nijmegen, Netherlands, May 5-8, 1971.
p0052 A73-14276
Telemetry of respiratory air flow.
p0053 A73-14286
Investigations during exercise with an improved PO2 telemetry system.
p0053 A73-14287
Telemetry of biomechanical forces during exercise.
p0054 A73-14296

VOS, J. J.
Literature review of human macular absorption in the visible and its consequences for the cone receptor primaries
[IZF-1972-17] p0264 N73-23046

VOSBURGH, K. G.
Cellular effects of heavy charged particles.
p0398 A73-42183

VOSKRESENSKIY, A. D.
Organization of the experiments and overall condition of the subjects
p0255 N73-22011

VOTCHAL, B. E.
Method of PaCO2 determination in men with functional disorders of external respiration
p0239 A73-29075

VOUKYDIS, P. C.
Mathematical analysis of body surface potentials.
p0059 A73-15646

VREULS, D.
Measurement for flight training research.
p0083 A73-16726

VRINCIANU, R.
Electro-rheocardiotelemetric device for complex monitoring of the dynamics and efficiency of cardiac contraction.
p0053 A73-14292

VUKOBRATOVIC, M.
Contribution to the study of anthropomorphic systems.
p0581 A73-11052
VYGODSKAYA, N. N.
Measurements of the radiation characteristics in a multi-storeyed stand
p0378 N73-29332
VYKUKAL, H. C.
An anthropomorphic master-slave manipulator system.
p0344 A73-37316

W

WAAG, H. L.
The prediction of team monitoring performance under conditions of varied team size and decision rules.
p0081 A73-16710
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0082 A73-16723
The isolation of critical elements within selected maneuvers during primary flight training.
p0083 A73-16727
Identifying pilot error potential in the F-4 aircraft.
p0083 A73-16731
Monitoring performance across sense modes - An individual differences approach.
p0093 A73-18244
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community.
p0238 A73-28512
A new approach to criterion development in the replacement air group
[AD-748195] p0104 N73-14111
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community
[AD-755184] p0269 N73-23087
The use of confidential instructor ratings for the prediction of success in naval undergraduate pilot training
[AD-757693] p0296 N73-24146
WACLAWCZYK, J.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757
WADE, J. D.
Pattern of blood flow within the heart - A stable system.
p0125 A73-21214
WADE, N. J.
Effect of forward head inclination on visual orientation during lateral body tilt.
p0041 A73-13000
Binocular rivalry and binocular fusion of after-images.
p0200 A73-26200
WAECHTER, A.
Pulmonary respiration and acid-base state in hibernating marmots and hamsters.
p0129 A73-21613
WAELDELE, G.
Permanent catheterism of the thoracic aorta - Direct measurement of arterial pressure, injection of substances, and the taking of blood in wake rats
p0435 A73-45160
WAGENAAR, W. A.
Are subjective probabilities probabilities?
[IZF-1973-3] p0268 N73-23076
Paced and selfpaced work in continuous reaction time tasks
[IZF-1973-5] p0268 N73-23077
Musical interval recognition with simultaneous tones
[IZF-1972-20] p0268 N73-23078
WAGENEDER, F. H.
Digital temperature-measuring device for medical applications
p0236 A73-28338
WAGNER, G.
EMG from smooth musculature /uterus, ureter, gut/ in unrestrained animals monitored by telemetry.
p0054 A73-14297
WAGNER, G. S.
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052
WAGNER, J. A.
Validation of open-circuit method for the determination of oxygen consumption.
p0310 A73-35462
WAGNER, M.
The superiority of the pair-comparisons method for scaling visual illusions.
p0311 A73-35497
WAGNER, P. D.
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
WAKEFIELD, TH. W.
Origin, classification, nomenclature and incidence of the atrial arteries in normal human hearts, with special reference to their clinical importance.
A73-15522
WAKLEY, E. J.
Blood groups and plasma cholesterol esterification.
p0408 A73-43106
Blood group A sub-groups and serum cholesterol.
p0408 A73-43107
WALBURG, H. E., JR.
Animal radiation data and their relevance to man
[CONF-720108-2] p0066 N73-12102
WALCH, O.
The effects of muscular exercise on urinary excretions of adrenal hormones in the normal man
[NASA-TT-F-15046] p0374 N73-29043
WALCOTT, W. B.
A statistical evaluation of the injury potential of a square wave energy absorber
[AD-745919] p0612 N73-11102
WALD, N.
Automatic microscopy for mitotic cell location.
p0206 A73-27144
WALDEISEN, L. E.
Individual differences as a function of four choice informational load and s-r compatibility
[AD-752073] p0150 N73-17115
WALKENBACK, J. E.
Evaluation of Hadron Model 112 Laser Safety Eyeshields, January - March 1973
[AD-759921] p0337 N73-26099
WALKER, J. G.
Studies in hearing conservation.
p0309 A73-35326
WALKER, L. B., JR.
Mass, volume, center of mass and mass moment of inertia of the head and neck of the human body
[AD-762581] p0377 N73-29065
WALKER, P. D.
Evaluation of laser eye protectors commercially available
[AD-746293] p0612 N73-11100
WALKER, S. A.
Pilot parameter identification via the extended Kalman filter
[AD-764694] p0441 N73-32026
WALKINSHAW, C. H.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Volatile terpenoids from aeciospores of Cronartium fusiforme.
p0206 A73-27145
WALLACE, C. J.
Lipid-absorbing polymers
p0191 N73-19976
WALLACE, J. E.
Drug abuse detection efforts
p0228 N73-21117
WALLEVIK, K.
An implantable radiotelemetrical measuring device for simultaneous long term measurements of body temperature and turnover of rabbit serum albumin/I-125 in unrestrained rabbits.
p0054 A73-14301
WALLSTEN, T. S.
Conjoint-measurement framework for the study of probabilistic information processing.
p0588 A73-12545
WALRAVEN, J.
Spatial characteristics of chromatic induction -

The segregation of lateral effects from stray light artefacts.
p0346 A73-37419

WALTERS, R. F.
Systems analysis of physiological performance related to stresses such as those experienced in high performance air craft
[AD-754970] p0230 N73-21133

WANDS, R. C.
Guides for short-term exposures of the public to air pollutants
[AD-751438] p0139 N73-16084
Basis for establishing guides for short term exposure of the public to air pollutants
[AD-751437] p0140 N73-16088
The relationship of NASA occupational medicine and environmental health with the Advisory Center on Toxicology
p0144 N73-17058

WANG, R. C.
A model to predict respiration from VCG measurements.
p0123 A73-20578

WANG, S. C.
Changes in ventilatory patterns after ablation of various respiratory feedback mechanisms.
p0576 A73-10162

WAPNER, S.
Apparatus note - A system for detecting and recording movements of the head.
p0086 A73-17522

WARBASSE, J. R.
Immediate hemodynamic effects of cardiac angiography in man.
p0165 A73-23841

WARD, W. D.
Damage-risk criteria - The trading relation between intensity and the number of nonreverberant impulses.
p0288 A73-33678

WARDEN, J. A.
Effects of methylene chloride exposure on the spontaneous activity of mice
[AD-751435] p0139 N73-16082

WARE, J. R.
An input adaptive, pursuit tracking model of the human opertor
p0597 N73-10108

WARITZ, R. S.
The toxicology of some commercial fluorocarbons
[AD-751429] p0138 N73-16079

WARR, J. S.
General and specific factors in the intersensory transfer of form.
p0043 A73-13525
Motivation in vigilance - A test of the goal-setting hypothesis of the effectiveness of knowledge of results.
p0304 A73-34149
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705

WARRE-JANVILLE, R.
Application of the numerical study of random time series to the analysis of the electroencephalogram of the normal infant
p0128 A73-21540

WARRE, P. R.
Refinement of X ray data on proteins. II - Adjustment of structure of specified geometry to relieve atomic overlaps.
p0308 A73-34893

WARNER, H. D.
Target-detection performance as a function of noise intensity and task difficulty.
p0201 A73-26320

WARNER, P.
European approach to dummy design.
p0306 A73-34617

WARNICK, W. L.
Combat job requirements for the air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027

WARREN, J.
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction.
p0286 A73-33115

WARREN, R. D.
A hybrid computer technique for measuring human describing functions and remnant in closed loop tracking tasks
[AD-748659] p0100 N73-14078

WARREN, S.
Developments in space medicine.
p0086 A73-17569
Ionizing radiation
p0105 N73-15100

WARTAK, J.
Numerical classification and coding of electrocardiograms.
p0059 A73-15647

WARZEL, H.
The effect of time of electrical stimulation of the carotid sinus on the amount of reduction in arterial pressure.
p0056 A73-14648

WASER, M. M.
Multichannel telemetry of physiological parameters /body temperature, EKG, EEG/ in the rat. II - Applications in neuropharmacology.
p0055 A73-14306

WASSERMAN, K.
On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785

WATANABE, A.
Control mechanism of the accommodation-vergence eye-movement system in human eyes
p0411 N73-30062
Roles of central and peripheral vision in pattern perception
p0411 N73-30063

WATANABE, H.
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319
Experimental studies on the production of pulmonary infarction. IV - Effects of UK, heparin, t-AMCHA or ellagic acid.
p0399 A73-42319

WATANABE, S.
Preferred spike intervals in the vibration reflex.
p0578 A73-10410

WATANABE, Y.
Electrocardiographic alterations in the presence of angina pectoris.
p0321 A73-36542

WATSON, B. W.
The use of telemetry to study the physiological and clinical variations of intracranial pressure in man.
p0054 A73-14300

WATSON, W. J.
Effect of lithium on acute oxygen toxicity and associated changes in brain gamma-aminobutyric acid.
p0238 A73-28503

WATTIER, J. M.
Fractures of the spine during flight /concerning two cases encountered during pumping/
p0586 A73-12154

WAUGH, R. A.
Immediate and remote prognostic significance of fascicular block during acute myocardial infarction.
p0243 A73-30052

WEAVER, S.
Mechanisms of oxygen toxicity at the cellular level
[AD-758725] p0299 N73-25124

WEBB, J. A., JR.
Cardiac R-wave detector with automatic sensitivity control
[NASA-TN-D-7152] p0112 N73-15158
Circuit for detecting initial systole and dicrotic notch
[NASA-CASE-LEW-11581-1] p0178 N73-18139

WEBB, M.
Some experiments on the friction of fabrics on human skin
[RAE-TR-72037] p0604 N73-10157

WEBB, P.
Work, heat, and oxygen cost

p0106 N73-15109

WEBB, W. B.
Estimation of the passing of four consecutive hours.
p0086 A73-17524
Sleep behaviour as a biorhythm.
p0286 A73-33158

WEBBON, B. W.
Study of space shuttle EVA/IVA support requirements. Volume 2: EVA/IVA tasks, guidelines, and constraints definition
[NASA-CR-133992] p0419 N73-31007

WEBSTER, J. C.
Perceptual confusions between four-dimensional sounds
[OES-6/72] p0421 N73-31023

WEBSTER, J. G.
60-Hz interference in electrocardiography.
p0163 A73-23648
Noninvasive measurement of central venous pressure
[NASA-CR-130348] p0133 N73-16039

WEEKS, G. D.
Studies in interactive communication. I - The effects of four communication modes on the behavior of teams during cooperative problem-solving.
p0093 A73-18241

WEETE, J. D.
Effect of lunar materials on plant tissue culture.
p0202 A73-26482
Response of tobacco tissue cultures growing in contact with lunar fines.
p0203 A73-26483
Volatile terpenoids from aeciospores of Cronartium fusiforme.
p0206 A73-27145
Total lipid and sterol components of Rhizopus arrhizus - Identification and metabolism.
p0288 A73-33900
Sterols of the fungi - Distribution and biosynthesis.
p0429 A73-44699
Effects of Apollo 12 lunar material on lipid levels of tobacco tissue and slash pine cultures
[NASA-CR-128606] p0591 N73-10063

WEGMANN, H. M.
Resynchronization of diurnal performance rhythms after transmeridian flights
p0368 N73-27958
Changes in the 24-hour rhythm after two transatlantic flights in rapid sequence
p0369 N73-27964

WEGNER, S.
The relationship between left ventricular ejection time and stroke volume during passive cardiovascular stress.
p0390 A73-41565

WEIBELL, F. J.
Biomedical instrumentation and measurements.
p0312 A73-35860

WEIDNER, M.
Active plant growth at freezing temperatures.
p0203 A73-26486

WEIL, J. V.
Augmentation of chemosensitivity during mild exercise in normal man.
p0080 A73-16610

WEIL, M. H.
Automated calibration of blood pressure signal conditioners.
p0057 A73-14846
An equation for the oxygen hemoglobin dissociation curve.
p0434 A73-45070

WEIMAN, C. F. R.
Pattern recognition by retina-like devices
[PB-211238] p0102 N73-14096

WEINBERGER, H. K.
Inflight Blood Collection System (IBCS) verification plan
[NASA-CR-128645] p0067 N73-12112

WEINBLATT, E.
Angina pectoris in men - Prognostic significance of selected medical factors.
p0201 A73-26288

WEINSTEIN, H. S.
Dichloromethane hepatotoxicity in mice with continuous and intermittent inhalation exposures
[AD-751434] p0138 N73-16081

WEINSTOCK, L. I.
The Ventilated Wet Suit for naval aircrewmen.
p0285 A73-32672

WEIR, D. H.
The measurement of driver describing functions in simulated steering control tasks
p0600 N73-10130

WEISER, P. C.
Effects of exercise on activity of heart and muscle mitochondria.
p0575 A73-10135

WEISER, S.
Understanding the effect of calcium-deficient diet on the composition of growing bone
[NASA-TT-F-13917] p0592 N73-10067

WEISLOGEL, G. S.
General aviation pilot operations.
[SAE PAPER 730334] p0307 A73-34687

WEISS, D.
Model concept concerning some control principles of the human organism. III - Seasonal adaptation
p0282 A73-32357

WEISS, H. G.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112

WEISS, M. S.
Non-Gaussian properties of the EEG during sleep.
p0126 A73-21465

WEISSMAN, B.
Frontal sinus hematomas in aerospace medicine.
p0155 A73-22538

WEIZEL, A.
The incidence of abnormal liver function tests in drug addicts without a history of jaundice
[NASA-TT-F-15041] p0374 N73-29044

WEKSTEIN, D. R.
Circadian phase relationships in monkeys
p0224 N73-21088

WELCH, A. J.
Variations of heart rate during sleep as a function of the sleep cycle.
p0359 A73-39762
Bandwidth reduction of sleep information, Volume 2
[AD-740946] p0605 N73-10167

WELCH, R. B.
The effect of accessory auditory stimulation upon detection of visual signals.
p0097 A73-18625

WELL, A. D.
Effects of color differences in a letter matching task.
p0588 A73-12525

WELLER, C.
A three channel telemetry system, compatible with the British medical and biological telemetry regulations.
p0052 A73-14277

WELLS, G. W.
Test results of six-month test of two water electrolysis systems
[NASA-CR-128629] p0612 N73-11095

WELLS, R. E.
Effect of ultrafiltration and plasma osmolarity upon the flow properties of blood - A possible mechanism for control of blood flow in the renal medullary Vasa recta.
p0125 A73-21199

WELLS, W. H.
Factors affecting long range vision
p0450 N73-33630

WELTMAN, G.
Interactive aspects of man/learning system control teams.
p0081 A73-16708
Underwater work performance and work tolerance
[AD-747701] p0072 N73-13107
Man/machine interaction in adaptive computer aided control initial study
[AD-754835] p0222 N73-20147

WEMPE, T.
Pilot performance with a simulated ILS independence pictorial display
p0599 N73-10122
Pilot performance during a simulated standard instrument procedure turn with and without a predictor display
[NASA-TM-X-62201] p0150 N73-17118

WENGER, R.
Circuit technology of a temperature-measurement transmitter for biotelemetric applications
p0239 A73-28575
WENNBERG, L. A.
Energy balance and change in body weight and body water in man during a 2-day cold exposure.
p0433 A73-45059
WENNERGREN, G.
Extent of engagement of various cardiovascular effectors to alterations of carotid sinus pressure.
p0078 A73-16250
WENT, L. N.
The colour vision characteristics of an observer with unilateral defective colour vision - Results and analysis.
p0585 A73-12077
WENZEL, H. G.
Influence of high ambient temperatures on the performance and some physiological parameters in a tracking problem and an optical vigilance problem
p0129 A73-21575
WERBER, M.
A bibliography of wildlife movements and tracking systems
[NASA-CR-130380] p0133 N73-16040
WERBLIN, F. S.
The control of sensitivity in the retina.
p0097 A73-18673
WERNICKE, B. K.
Limitations of unaided eye visual target detection from high speed low flying aircraft correlated with target background environment
[AD-759651] p0300 N73-25136
WERTS, M. F.
Dysbaric osteonecrosis: An annotated bibliography with preliminary analyses
[AD-747258] p0071 N73-13100
WEST, D. R.
Hematological viscometry
p0231 N73-21142
WEST, J. B.
Cardiorespiratory responses to exercise in air and underwater.
p0576 A73-10161
Finite element displacement analysis of a lung.
p0056 A73-14661
WEST, T. C.
Electrophysiology of the sinoatrial node.
p0197 A73-25595
WEST, V. R.
Bioastronautics data book, second edition
[NASA-SP-3006] p0104 N73-15091
A review of the influence of physical condition parameters on a typical aerospace stress effect: Decompression sickness
[NASA-CR-135495] p0418 N73-31002
WESTBROOK, P. R.
Effects of anesthesia and muscle paralysis on respiratory mechanics in normal man.
p0127 A73-21505
WESTBROOK, R. H.
Single and multichannel implanted telemetry systems.
p0054 A73-14302
A narrowband, crystal controlled biomedical telemetry system.
p0162 A73-23381
WESTENDORF, D. H.
Reaction time to changes in the tempo of acoustic pulse trains.
p0404 A73-42705
WESTHEIMER, G.
Optical properties of vertebrate eyes.
p0161 A73-23312
Visual acuity as a function of exposure duration.
p0165 A73-23838
Accommodation of the eye during sleep and anesthesia.
p0245 A73-30391
Concerning the supranuclear organization of eye movements.
p0316 A73-36435
WESTMORELAND, D. G.
The study of biological macromolecules using perturbed angular correlations of gamma radiation.
p0589 A73-12648
WEXLER, L.
Regional myocardial dynamics from single-plane coronary cineangiograms.
p0171 A73-24771
WEYANT, R.
Compact carbon monoxide sensor utilizing a confocal optical cavity.
[ASME PAPER 73-ENAS-20] p0350 A73-37976
WEYBREW, B. B.
Psychological effects of prolonged exposure to sonar signals at an elevated intensity. 1: Five days' exposure to signals at 85 dB
[AD-744938] p0594 N73-10087
Psychological effects of prolonged exposure to sonar signals at an elevated intensity. 2: Twenty-four days exposure to signals at 85 dB
[AD-746103] p0611 N73-11089
WHEATON, G. R.
Development of a standardized battery of performance tests for the assessment of noise stress effects
[NASA-CR-2149] p0148 N73-17102
WHEELER, H. O.
Food and nutrition studies for Apollo 16
[NASA-TM-X-58096] p0067 N73-12110
WHERRAT, A. F.
Effects of hypoxemia and acute coronary occlusion on myocardial metabolism in dogs.
p0077 A73-16154
WHERRY, F. E.
Multiple hormonal responses to graded exercise in relation to physical training.
p0048 A73-14116
Multiple hormonal responses to prolonged exercise in relation to physical training.
p0048 A73-14117
WHIPP, B. J.
On-line computer analysis and breath-by-breath graphical display of exercise function tests.
p0127 A73-21511
Anaerobic threshold and respiratory gas exchange during exercise.
p0360 A73-39785
WHITCOMB, M. A.
Processing of auditory information by medial superior-olivary neurons.
p0244 A73-30281
WHITE, C. W.
Effect of elimination of nitrogen and/or hypoxia or restricted visual environment on color vision and range of accommodation
[NASA-CR-128896] p0258 N73-22037
WHITE, D. N.
The orbit and superior orbital fissure as an acoustic window.
p0402 A73-42667
WHITE, E.
Review of a series of proctosigmoidoscopies done at Wallops Station, Virginia
p0144 N73-17061
A case of near fatal ammonia gas poisoning
p0147 N73-17088
WHITE, R. C.
Effects of prolonged dark adaptation on autokinetic movement.
p0202 A73-26322
WHITE, R. M.
The body size of soldiers: US Army anthropometry, 1966
[AD-743465] p0604 N73-10160
Anthropometry of US Army aviators, 1970
[AD-743528] p0605 N73-10162
WHITE, R. M., JR.
Factors affecting the detection and recognition of colored targets
[AD-746297] p0610 N73-11083
WHITE, S. C.
Biomedical acceptability of 45- to 60-day space flight
[NASA-CR-129131] p0609 N73-11074
WHITEHOUSE, W. C.
Use of a video system in the study of ventricular function in man.
p0348 A73-37797
WHITFIELD, O.
Effect of simulated lunar impact on the survival of bacterial spores.
p0357 A73-39485

WHITFIELD, W. J.
The synergistic inactivation of biological systems by thermoradiation.
p0288 A73-33696
WHITMORE, F. C.
Evaluation of proposed Skylab and SSP soap products.
[ASME PAPER 73-ENAS-26] p0350 A73-37981
Evaluation of proposed Skylab and SSP soap products
[NASA-CR-128880] p0222 N73-20143
WHITNEY, D. E.
The mathematics of coordinated control of prosthetic arms and manipulators.
[ASME PAPER 72-WA/AUT-4] p0061 A73-15884
Study of design and control of remote manipulators. Part 1: Summary and conclusions
[NASA-CR-124191] p0259 N73-22046
WHITNEY, R. U.
Performance of the anti-G valve when subjected to varying lateral forces
[AD-760814] p0377 N73-29062
WHITTEN, D. N.
The time courses of late receptor potentials from monkey cones and rods.
p0046 A73-13761
Photopic suppression of monkey's rod receptor potential, apparently by a cone-initiated lateral inhibition.
p0345 A73-37412
Slowed decay of the monkey's cone receptor potential by intense stimuli, and protection from this effect by light adaptation.
p0346 A73-37413
WHITTLE, P.
The brightness of coloured flashes on backgrounds of various colours and luminances.
p0129 A73-21565
WHITTOW, G. C.
Special aspects of thermoregulation.
p0406 A73-42859
Evolution of thermoregulation.
p0406 A73-42863
WICK, R. L., JR.
Effects of ethyl alcohol on pilot performance.
p0237 A73-28501
Ethyl alcohol and pilot performance: Military implications of in-flight studies
p0227 N73-21113
WIECHOWSKI, W.
The scientific basis of mineral water therapy, especially that of the Karlsbad Muehlbrunn
[NASA-TT-P-14620] p0069 N73-13079
WIENER, W.
The role of the vagus nerves in the respiratory response to CO2 under hyperoxic conditions.
p0583 A73-11501
The role of the carotid chemoreceptors in the CO2-hyperpnea under hyperoxia.
p0583 A73-11502
WIENER, E. L.
Adaptive measurement of vigilance decrement.
p0423 A73-43211
WIENER, L.
Relationship of anginal symptoms to lung mechanics during myocardial ischemia.
p0589 A73-12820
WIENSS, W.
Operation of spacecraft in orbit with the aid of remote-controlled manipulators - A joint project of ERNA, KYBERTRONIC, KLEBA
[DGLR PAPER 72-098] p0584 A73-11659
WIGHTMAN, F. L.
The pattern-transformation model of pitch.
p0393 A73-41816
WIGLE, E. D.
Television/computer dimensional analysis interface with special application to left ventricular cineangiograms.
p0089 A73-17860
WILBURN, D. L.
Tracking performance during whole body vibration with side mounted and center mounted control sticks
[AD-761798] p0370 N73-27971
WILCKENS, V.
On the dependence of information display quality requirements upon human characteristics and pilot/automatics relations
p0600 N73-10126
WILCOX, J. G.
Specific acute losses of vestibular function in man following unilateral section of one or all components of the eighth cranal nerve
[NASA-CR-129672] p0070 N73-13084
WILDENTHAL, K.
Method for measuring the contractions of small hearts in organ culture.
p0125 A73-21218
WILKE, J. T.
Variations in the motor potential with force exerted during voluntary arm movements in man.
p0385 A73-41013
WILKERSON, J. E.
Critical temperature of unacclimatized male Caucasians.
p0577 A73-10166
WILKES, D. R.
Spacecraft environmental optical contamination problems associated with thermal control surface outgassing.
[ASME PAPER 73-ENAS-32] p0351 A73-37987
WILKINS, J. R.
Cinemicrographic study of the development of subsurface colonies of Staphylococcus aureus in soft agar.
p0131 A73-21828
Automatic surface inoculation of agar trays.
p0155 A73-22550
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] p0136 N73-16061
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] p0141 N73-16096
Bacterial identification using light scattering measurements: A preliminary report
p0147 N73-17090
WILKINSON, R. T.
Effects of flying and of time changes on menstrual cycle length and on performance in airline stewardesses.
p0238 A73-28509
WILL, D. H.
Cardiopulmonary responses of male and female swine to simulated high altitude.
p0432 A73-45058
WILL, J. A.
Ventilatory control in the Hereford calf.
p0360 A73-39782
WILLEY, R.
Correlations between motor learning and visual and arm adaptation under conditions of computer-simulated visual distortion.
p0044 A73-13556
WILLIAMS, R. A.
Brain calcium - Role in temperature regulation.
p0353 A73-38294
WILLIAMS, D. H.
Human thresholds for perceiving sudden changes in atmospheric pressure.
p0044 A73-13554
WILLIAMS, E. W.
Human endocrine-metabolic responses to graded oxygen pressures.
p0116 A73-19479
Time zone entrainment and flight stressors as interactants.
p0235 A73-28283
Physiologic cost of prolonged double-crew flights in C-5 aircraft.
p0386 A73-41152
WILLIAMS, J.
Survival of common bacteria in liquid culture under carbon dioxide at high temperatures.
p0284 A73-32650
WILLIAMS, L. W.
Evaluating the use of parotid fluid analysis as a measure of task difficulty
[AD-747671] p0073 N73-13111
WILLIAMS, W. T.
Human hematologic responses to 4 hr of isobaric hyperoxic exposure /100% oxygen at 760 mm Hg/.
p0241 A73-29751
Red blood cell density and volume changes in man exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072
WILLIAMSON, S. H.
Occupational medical trends in the 70's from industrial view
p0146 N73-17077

WILLIGES, R. C.
Double cross-validation of video cartographic symbol location performance.
p0082 A73-16719
Manipulating the response criterion in visual monitoring.
p0247 A73-30499
Response surface methodology central-composite design modifications for human performance research.
p0430 A73-44773
Transfer assessment using a between-subjects central-composite design.
p0430 A73-44774
Performance prediction in a single-operator simulated surveillance system.
p0431 A73-44775
Predictive validity of central-composite design regression equations.
p0431 A73-44776
Simulator motion as a factor in flight-director display evaluation
[AD-749370]
p0075 N73-13126
Detecting slow changes in system dynamics
[AD-748243]
p0102 N73-14097
Response surface methodology design variants useful in human performance research
[AD-748236]
p0102 N73-14099
WILLIS, H. H.
Biorhythm and its relationship to human error.
p0082 A73-16720
WILLIS, H. A.
Underwater work performance and work tolerance
[AD-747701]
p0072 N73-13107
WILMORE, J. H.
Adequacy of the Haldane transformation in the computation of exercise oxygen consumption in man.
p0324 A73-36658
WILSON, H. P.
Regression of altitude-produced cardiac hypertrophy.
p0433 A73-45065
WILSON, J. W.
Proton dosimeter design for distributed body organs.
p0424 A73-43389
Human factors in low weather operation of transport aircraft
p0270 N73-23901
WILSON, O.
Effect of skin wetting on finger cooling and freezing.
p0360 A73-39779
WILSON, R. V.
The effect of handedness on a tracking task
[RAE-TR-72117]
p0141 N73-16098
WILSON, T. A.
A continuum analysis of a two-dimensional mechanical model of the lung parenchyma.
p0577 A73-10168
A model for the elastic properties of the lung and their effect on expiratory flow.
p0126 A73-21502
WILSON, W. P.
Digital filters applicable to electroencephalographic pattern recognition.
p0582 A73-11464
WINSATT, J. C.
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-131103]
p0185 N73-19122
WINANS, L., JR.
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission
[NASA-CR-130009]
p0135 N73-16059
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission, 1 January - 30 June 1973
[BEPT-2]
p0333 N73-26063
WINCZUK, H.
Studies on the metabolism of glucose-1,6-diphosphate in human erythrocytes.
p0386 A73-41139
WING, A. M.
Response delays and the timing of discrete motor responses.
p0387 A73-41177
WINGET, C. M.
Method for analyses of cyclic physiological data that are nonstationary in time.
p0049 A73-14120
Circadian rhythm asynchrony in man during hypokinesis.
p0049 A73-14121
Thyroid and adrenal cortical rhythmicity during bed rest.
p0049 A73-14122
Dissociation of effects of prolonged confinement and bedrest in normal human subjects: Heart rate and body temperature
p0175 N73-18113
Dissociation of effects of prolonged confinement and bed rest in normal human subjects: cortisol, insulin, thyroxine, and triiodothyronine
p0175 N73-18114
WINTER, W. R.
An operating environmental health program
p0147 N73-17093
WINTER, Z.
A simple cardiac contractility computer.
p0403 A73-42677
WINTERS, W. G.
The effect of exercise on intrinsic myocardial performance.
p0352 A73-38258
WIRZ, P.
Isovolumic contraction dynamics in man according to two different muscle models.
p0576 A73-10158
High-fidelity left ventricular pressure measurements for the assessment of cardiac contractility in man.
p0209 A73-27888
WISE, G.
Linearity of the horizontal component of the electro-oculogram.
p0115 A73-19125
WISE, K. D.
An IC piezoresistive pressure sensor for biomedical instrumentation.
p0163 A73-23649
WISE, R. C.
Space suit
[NASA-CASE-MSC-12609-1]
p0439 N73-32012
WIST, E. R.
Eye movements and space perception.
p0318 A73-36462
WIT, A. L.
Genesis of cardiac arrhythmias.
p0097 A73-18874
WITHAM, A. C.
Current status of correlations between vectorcardiogram and hemodynamic data.
p0319 A73-36526
WITTEN, I. H.
Human operators and automatic adaptive controllers - A comparative study on a particular control task.
p0122 A73-20399
WITZ, S.
Development of a laboratory prototype water quality monitoring system suitable for use in zero gravity
[NASA-CR-112267]
p0222 N73-20144
WITZEL, R. F.
Threshold and suprathreshold perceptual color differences.
p0275 A73-31019
WODICK, R.
A new method for determining the degree of oxygenation of hemoglobin spectra in the case of inhomogeneous light paths, explained in an analysis of spectra of the human skin
p0356 A73-39145
WODICKA, D.
Handling system for Iridium-192 seeds
p0231 N73-21143
WOELLER, F. H.
Biological effects of fuel and exhaust components from spacecraft descent engines employing hydrazine
[NASA-TM-X-2714]
p0107 N73-15118
WOERLEE, M.
Direct measurement of sensible heat transfer between man and his environment.
p0049 A73-14123
WOJCIK, C. K.
The measurement of driver describing functions in

simulated steering control tasks
p0600 N73-10130

WOJTKOWIAK, H.
Research on the displacement of blood-plasma proteins and on the nerve conduction velocity in rats subjected to accelerations and hypokinesia
p0088 A73-17769
Normalisation of haemodynamic changes caused by action of prolonged accelerations in rats.
p0314 A73-35985

WOLBARSHT, M. L.
Theoretical aspects of color vision
p0179 N73-19066
Effect of elimination of nitrogen and/or hypoxia or restricted visual environment on color vision and range of accommodation
[NASA-CR-128896] p0258 N73-22037

WOLBURG, I.
Investigations concerning the coordination of heart rate and respiration rate /pulse-respiration quotient/ during exercise
p0119 A73-20034

WOLF, E.
Transient S-T elevation detected by 24-hour ECG monitoring during normal daily activity.
p0424 A73-43492

WOLF, H.
Waveform vector analysis of orthogonal electrocardiograms - Quantification and data reduction.
p0286 A73-33115

WOLFE, J. W.
Clinical applications of averaging techniques in studies of vestibulo-oculomotor function. I - Basic techniques and illustrative cases.
[AD-758545] p0196 A73-25339

WOLLENHAUPT, H.
Effects of space vacuum and solar ultraviolet irradiation (254 nanometers) on the colony forming ability of Bacillus subtilis spores
p0291 N73-24108

WOLOCHOW, H.
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-133638] p0375 N73-29049
Release of bacterial spores from the inner walls of a stainless steel cup subjected to thermal stresses and mechanical shock
[NASA-CR-133868] p0416 N73-30987

WOLTER, F.
The effect of social-emotional environmental stress on the functional state of the neocortical structures of rhesus monkeys
p0347 A73-37755
Automatic apparatus for the study of conditioned reflexes in a monkey seated in the primatological chair
p0386 A73-41140

WOOD, C. D.
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet /simulated/.
p0154 A73-22529
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet simulated
[AD-748192] p0103 N73-14105

WOOD, E. H.
Experimental studies on the mechanisms of closure of cardiac valves with use of roentgen videodensitometry.
p0348 A73-37795
Biplane roentgen videometric system for dynamic, 60/sec, studies of the shape and size of circulatory structures, particularly the left ventricle.
p0348 A73-37798
Studies of the effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-129603] p0063 N73-12074
Studies of the effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119

WOOD, G. A.
Respiratory nitrogen elimination - A potential source of error in closed-circuit spirometry.
p0356 A73-39113

WOOD, L. D. H.
Gas mixing during breath holding studied by intrapulmonary gas sampling.
p0323 A73-36651
Gas mixing during inspiration.
p0323 A73-36652

WOOD, N. B.
Application of constant temperature anemometry in measurement of intra-arterial blood flow velocity.
p0085 A73-17274

WOOD, P. W., JR.
Study of space shuttle EVA/IVA support requirements. Volume 1: Technical summary report
[NASA-CR-133991] p0414 N73-30089
Study of space shuttle EVA/IVA support requirements. Volume 2: EVA/IVA tasks, guidelines, and constraints definition
[NASA-CR-133992] p0419 N73-31007
Study of space shuttle EVA/IVA support requirements. Volume 4: Requirements study for space shuttle mobility aids
[NASA-CR-133994] p0419 N73-31009

WOODCOCK, H. F.
Glass ocular laser protective filters
[AD-755406] p0261 N73-22057

WOODHEAD, M. M.
Perceptual confusions between four-dimensional sounds
[OES-6/72] p0421 N73-31023

WOODS, W. J.
Evaluation of a device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103

WOODWARD, D. J.
The development of synapses in the rat cerebellar cortex.
p0051 A73-14256

WOOTEN, F. T.
Advancements in medicine from aerospace research
p0075 N73-13848
Applications of aerospace technology in biology and medicine
[NASA-CR-130544] p0142 N73-17047

WORKMAN, J. M.
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213834/1] p0267 N73-23073

WORRELL, G. D.
The USAF aircraft maintenance manpower process: 1947 through 1972
[AD-760082] p0337 N73-26097

WORTHMANN, W.
Stress recovery of human tendons after relief - Mechanical recovery
p0119 A73-20033

WORTZ, E.
Objective techniques for psychological assessment
[NASA-CR-128945] p0295 N73-24136

WRANNE, B.
Cyclical variations in FRC and other respiratory variables in resting man.
p0278 A73-31346

WRENN, R. T.
Microbial response to space environment, part B
p0232 N73-21762
Postflight analyses of Bacillus thuringiensis organisms exposed to space flight conditions
p0291 N73-24109

WRIGHT, C. M.
Use of hypnotics by aircrew. 1: Operational considerations and experimental studies
p0226 N73-21106

WRIGHT, D. L.
The Mesa Arizona pupil tracking system
p0191 N73-19985

WRIGHT, P. E.
Apollo 11 impact on the occupational medicine program, NASA Manned Spacecraft Center
p0143 N73-17049

WRIGHT, R. H.
Determining training device requirements in fixed wing aviator training
[AD-744447] p0604 N73-10158

WRIGHT, R. M.
Development of design information for molecular-sieve type regenerative CO2-removal systems
[NASA-CR-2277] p0366 N73-27948

WRIGHT, N. B.
Pulmonary mechanical functions in man breathing dense gas mixtures at great depths
[AD-749028] p0100 N73-14082

WUENSCHE, O.
Pressure gradient measurements in the bodies of animals with air blast injuries
[DLR-FB-71-72] p0113 N73-15164

WULFECK, J. W.
Visual performance with high-contrast cathode-ray tubes at high levels of ambient illumination.
p0093 A73-18243
Effect of a predictor display on carrier landing performance. Phase b: Display mechanization and preliminary evaluation
[AD-750294] p0103 N73-14102

WUNDER, C. C.
Oxygen consumption measurements during continual centrifugation of mice.
p0434 A73-45071

WUNNENBERG, W.
Response of single units of the posterior hypothalamus to thermal stimulation.
p0048 A73-14111

WURTMAN, R. J.
Brain serotonin content - Physiological regulation by plasma neutral amino acids.
p0578 A73-10408
Effects of endotoxin on monoamine metabolism in the rat.
p0582 A73-11100
Hydroxyindole-O-methyl transferases in rat pineal, retina and Harderian gland.
p0589 A73-12644
Binding of melatonin to human and rat plasma proteins.
p0170 A73-24657
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0209 A73-27975
Control of pineal indole biosynthesis by changes in sympathetic tone caused by factors other than environmental lighting.
p0343 A73-37300
Serum tryptophan level after carbohydrate ingestion - Selective decline in non-albumin-bound tryptophan coincident with reduction in serum free fatty acids.
p0389 A73-41218

WURTZ, R. H.
The role of the superior colliculus in visually-evoked eye movements.
p0316 A73-36445

WYATT, H. J.
Scotopic vision - An unexpected threshold elevation produced by dark annuli.
p0585 A73-12080

WYBORNY, L. E.
Abnormal biochemistry in myocardial failure.
p0404 A73-42686

WYDEVEN, T.
Synthesis of reverse osmosis membranes by plasma polymerization of allylamine.
p0115 A73-19169
Evaluation of 165 deg F reverse osmosis modules for washwater purification.
[ASME PAPER 73-ENAS-2] p0349 A73-37964

WYLIE, C. D.
Active sonar target detection and reporting: Perceived consequences and their effects on performance
[AD-750761] p0114 N73-15174

WYMAN, D.
Miniature eye movement.
p0383 A73-40411

WYNDHAM, C. H.
The significance of an increased RQ after sucrose ingestion during prolonged aerobic exercise.
p0391 A73-41621
Plasma insulin and carbohydrate metabolism after sucrose ingestion during rest and prolonged aerobic exercise.
p0391 A73-41622

WYSS, C.
Control of forearm skin blood flow during periods of steadily increasing skin temperature.
p0324 A73-36657

WYSS, C. R.
Sustained human skin and muscle vasoconstriction with reduced baroreceptor activity.
p0277 A73-31344

Y

YABLONSKIY, A. I.
The expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057

YAKIMOFF, N.
A combined photoelectric method for detecting eye movements.
p0585 A73-12079

YAKOVETS, B. N.
Study of some psychic functions of aquanauts during prolonged exposure to increased pressure
p0068 N73-13073

YAKOVLEVA, I. Y.
Study of reactions of human otorhinolaryngological organs during hypokinesia
p0256 N73-22015
Analysis of some indices of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026

YAKOVLEVA, V. I.
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101

YAKSHINA, A. N.
The loss part of the organic matter balance in oak underwood depending on the light conditions
p0378 N73-29331

YAKUBOVICH, V. A.
One class of adaptive systems and results of computer modeling of their self-instruction
p0447 N73-33056

YAKUT, M. M.
Cost analysis of water recovery systems
[NASA-CR-124098] p0177 N73-18134
Cost analysis of oxygen recovery systems
[NASA-CR-124175] p0230 N73-21137
Cost analysis of life support systems
[NASA-CR-124305] p0340 N73-27072
Cost analysis of carbon dioxide concentrators
[NASA-CR-124302] p0340 N73-27073
Cost analysis of water recovery systems
[NASA-CR-124303] p0340 N73-27074
Cost analysis of oxygen recovery systems
[NASA-CR-124304] p0340 N73-27075
Cost analysis of atmosphere monitoring systems
[NASA-CR-124306] p0341 N73-27076
Life support system cost study: Addendum to cost analysis of carbon dioxide concentrators
[NASA-CR-124462] p0447 N73-33052

YAMAGUCHI, S.-I.
Prefrontal lobe functions and the neocortical commissures in monkeys.
p0435 A73-45166

YAMAMOTO, M.
Model experiments on the prebiological formation of protein.
p0090 A73-17938
Influence of synchronized sleep upon spontaneous and induced discharges of single units in visual system.
p0201 A73-26223
Behavioral and electrophysiological correlates during flash-frequency discrimination learning in monkeys.
p0242 A73-29989

YAMANAKA, T.
Opponent-colors responses in the visually evoked potential in man.
p0308 A73-34844

YAMASHIRO, S. M.
Respiratory cycle optimization in exercise.
p0433 A73-45066

YANG, C. H.
Interaction between radiation effects, gravity and other environmental factors in Tribolium confusum.
p0384 A73-40808

YANG, C.-H.
Biophysical considerations concerning gravity receptors and effectors including experimental studies on Phycomyces blakesleeanus.

p0397 A73-42171

YANG, R.
Single breath nitrogen washout method for measurement of functional residual capacity.
p0195 A73-25332

YANKELEVICH, V. I.
Calculation of the thermal resistance of the air layers in air-permeable clothing [AD-746037] p0612 N73-11099
Calculation of the thermal resistance of the air layers in air-permeable clothing [NLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089

YANOWITCH, E. A.
Aircraft as an instrument of self-destruction.
p0307 A73-34746

YANOWITCH, R. E.
Aircraft as an instrument of self-destruction.
p0307 A73-34746

YANOWITZ, F. G.
The correlation of coronary angiography and the electrocardiographic response to maximal treadmill testing in 76 asymptomatic men.
p0399 A73-42342

YARULLIN, K. K.
Changes in cerebral, pulmonary and peripheral blood circulations
p0255 N73-22012

YASTREBOV, B. S.
The question of modeling certain motor functions of the human arm
p0336 N73-26091

YASTREBOV, V. S.
An investigation of engineering methods of designing electrohydraulic follow-up drives for underwater manipulators
p0336 N73-26085

YAZDANFAR, S.
Problems in the recognition of angina pectoris.
p0321 A73-36541

YCAS, M.
De novo origin of periodic proteins.
p0116 A73-19219

YEFIMOV, V. I.
Effect of radioprotectants on functional state of the vestibular analyzer
p0263 N73-23033

YEGOROV, A. S.
Study of some psychic functions of aquanauts during prolonged exposure to increased pressure
p0068 N73-13073
Mood as a factor in an operator's performance
p0069 N73-13075

YEGOROV, B. B.
Organization of the experiments and overall condition of the subjects
p0255 N73-22011
Asymmetry of otolithic reactions in fish
p0262 N73-23031

YEGOROV, I. A.
DNA catabolism in the organs of rats under the influence of transversely directed accelerations
p0063 N73-12080
Action of a set of extremal factors on ribonuclease
p0185 N73-19120

YEGOROV, I. N.
Principal parameters and operating indices for reversible follow-up systems
p0335 N73-26081

YEGOROV, V. A.
Work of the Aerospace Section of the Leningrad Society of Physiologists, Biochemists and Pharmacologists Iseni I. M. Sechnov
p0445 N73-33037

YEGOROVA, N. N.
Studies of the stability of the chemical composition of a chlorella biomass during its prolonged cultivation with recovery of the medium on nitrates
p0184 N73-19108

YELINSKII, M. P.
Decompression disorders after exposure to safe pressure or safe altitude [DRIC-TRANS-30351] p0259 N73-22041

YEH, R.-T.
Model experiments on apparent blood viscosity and hematocrit in pulmonary alveoli.
p0433 A73-45064

YEH, T. F.
A search for porphyrin biomarkers in Nonesuch Shale and extraterrestrial samples.
p0202 A73-26481

YEREMIN, A. V.
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning
p0182 N73-19095
Physical training as a method for preventing the hypodynamic syndrome
p0256 N73-22018

YERMAKOVA, S. V.
Ergonomics research methods
p0414 N73-30086

YERMOKHIN, V. P.
Age restrictions in civil aviation
p0254 N73-21999
Some physiological reactions in pilots during training and during flight
p0254 N73-22001

YERRE, C.
Evoked potential correlates of expected stimulus intensity.
p0125 A73-21225

YERTANOV, I. D.
DNA catabolism in the organs of rats under the influence of transversely directed accelerations
p0063 N73-12080

YERTANOVA, I. D.
Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030

YEZEPCHUK, M. I.
Magnitude of the irreversible portion of radiation damage with the combined action of radiation and acceleration
p0214 N73-20082
State of the peripheral blood of irradiated animals under prolonged conditions of reduced barometric pressure
p0215 N73-20088

YONAS, A.
Searching for many targets - An analysis of speed and accuracy.
p0311 A73-35498

YORKE, H. C.
Monocular and binocular aspects of apparent movement.
p0121 A73-20262

YOSHIDA, T.
Control mechanism of the accommodation-vergence eye-movement system in human eyes
p0411 N73-30062
Roles of central and peripheral vision in pattern perception
p0411 N73-30063

YOSHIKAWA, J.
Unusual diastolic heart beat in pericardial effusion.
p0041 A73-13059

YOSHIMURA, H.
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800
Metabolism of drugs. 77: In vitro metabolism of antipyrine [NASA-TT-F-14868] p0218 N73-20116

YOSHIMURA, H.
Effect of high-fat diet on thermal acclimation with special reference to thyroid activity.
p0084 A73-16800

YOUNG, D. R.
Programmable physiological infusion [NASA-CASE-ARC-10447-1] p0101 N73-14092

YOUNG, D. T.
A new technique for the study of left ventricular pressure-volume relations in man.
p0353 A73-38259

YOUNG, F. W.
On the perception of a class of bilaterally symmetric forms.
p0311 A73-35495

YOUNG, H. L.
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524
Body water compartments during bed rest: Evaluation of analytical methods [NASA-TR-R-406] p0295 N73-24133

YOUNG, J. H., JR.
Automated three-dimensional dendrite tracking

system.
p0359 A73-39763

YOUNG, L. R.
Moving visual scenes influence the apparent direction of gravity.
p0058 A73-15250
Cross coupling between effects of linear and angular acceleration on vestibular nystagmus.
p0316 A73-36441
A descriptive model of multi-sensor human spatial orientation with applications to visually induced sensations of motion.
[AIAA PAPER 73-915] p0385 A73-40863
Human disorientation in a rotating spacecraft
p0599 N73-10119
Human control capabilities
p0106 N73-15107

YOUNG, R. A.
Some observations concerning saccadic eye movements.
p0245 A73-30389

YOUNG, R. S.
Space exploration and the origin of life.
p0090 A73-17930

YOUNG, R. W.
Neutron effectiveness for causing incapacitation in monkeys
[AD-742076] p0594 N73-10080

YOUSEF, M. K.
Responses of men and women to two-hour walks in desert heat.
p0360 A73-39784

YU, C. J.
Comparison of blood and alveolar gas composition during rebreathing in the dog lung.
p0201 A73-26218
Studies of alveolar-mixed venous CO2 and O2 gradients in the rebreathing dog lung.
p0201 A73-26219

YUCKER, W. R.
The Computerized Anatomical Man (CAM) model
[NASA-CR-134043] p0440 N73-32022

YUGANOV, Y. M.
Study of features of high intensity noise effects during spaceflight
p0180 N73-19080

YUGENOV, Y. M.
Review: Biomedical problems in space flights. Index of Soviet and foreign literature
p0218 N73-20115

YUKHNOVSKII, G. D.
Effect of restriction of motor activity of animals on their tolerance to an acute exposure to carbon monoxide
p0264 N73-23043

YUNUSOV, A. Y.
Increase in the tolerance of rats to a high temperature under the influence of thermal conditioning and drugs
p0216 N73-20099

YURGENS, I. L.
Morphological changes in the suprarenals of rats during hypokinesia
p0254 N73-22003

YUSKEN, J.
Body water compartments during bed rest: Evaluation of analytical methods
[NASA-TT-F-406] p0295 N73-24133

YUSKEN, J. M.
Effects of rehydration on +Gz tolerance after 14-days' bed rest.
p0425 A73-43524

Z

ZACKS, J. L.
Estimation of the variability of the latency of responses to brief flashes.
p0204 A73-26720

ZADOROZHNII, A. G.
Synaptic activation of thoracic spinal cord interneurons through reticulo-spinal pathways
p0156 A73-22576

ZAFERMAN, D. M.
Prediction of the outcomes of myocardial infarction from formulas derived by the dynamic programming method
p0354 A73-39000

ZAGORSKII, YU. M.
Reaction of the central nervous system to mechanical effects
p0304 A73-34227

ZAGORSKII, Y. M.
Central nervous system reaction to mechanical factors
p0372 N73-29024

ZAHKA, J. G.
Mechanism of oxygen transport augmentation by hemoglobin.
p0362 A73-39795

ZAITZEFF, L. P.
Degradation of learned skills: Effectiveness of practice methods on visual approach and landing skill retention
[NASA-CR-128912] p0269 N73-23086

ZAKHAROV, I. A.
Radiation genetics of microorganisms
p0060 A73-15701

ZAKHAROVA, I. N.
Dynamics of certain characteristics of the evoked potential of the optic cortex in rabbits under conditions of increasing hypoxia
p0208 A73-27709
Dynamics of some characteristics of induced potential of the optical region in the cerebral cortex in rabbits under conditions of increasing hypoxia
p0217 N73-20103

ZAKHAROVA, N. N.
Participation of cholinergic mechanisms in negative human emotions
p0362 A73-39799

ZAKHAROVA, S. I.
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019

ZAKHARZHEVSKAIA, N. P.
Afferent connections of the thermoregulation center
p0199 A73-26086

ZAKHER, IU. IA.
Ontogenesis of cerebrospinal reflex activity
p0121 A73-20366
Successive differentiation of visual stimuli in monkeys under various conditions of presentation
p0363 A73-39805

ZAKIRDZHAEV, D. D.
Structural changes in the adrenal nerve apparatus during experimental subtotal pancreatectomy
p0357 A73-39400

ZAKIS, IU. R.
Analysis of the spectra in a 'man-machine' system
p0159 A73-22971

ZAL'TSMAN, A. M.
The operativeness of an image of a controlled process
p0393 A73-41885
Effect of the information panel structure on operator activity
p0394 A73-41889

ZALIS, E. G.
Understanding electrocardiography: Physiological and interpretive concepts.
p0078 A73-16359

ZALIUBOVSKAIA, N. P.
Reactions of living organisms to the action of electromagnetic waves in the millimeter range
p0426 A73-44094
Effects of electromagnetic waves of the millimeter range on a cell and on some structural elements of a cell
p0427 A73-44095

ZALKIND, M. S.
Motor unit reactions of man to spinal and supraspinal inhibitory stimuli
p0349 A73-37943

ZALKIND, S. M.
Choice of optimal light characteristics for marks in optical sighting devices
p0306 A73-34241
Selection of optimum light characteristics of marks in optical sighting devices
p0374 N73-29039

ZAMAKHOVER, SH. M.
Electromyographic alterations in articular muscles during emotional shifts
p0167 A73-24328

ZAMOTA, V. P.
Effect of the frequency of changing the nutrient solution on productivity of plants cultivated on

keramzit
p0183 N73-19106
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method
p0184 N73-19110
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion
p0184 N73-19111

ZAPADNAIA, A. A.
Effects of space flight factors on the heredity of higher and lower plants.
p0397 A73-42168

ZARAKOVSKII, G. M.
Ergonomics principles and recommendations, no. 2 [NASA-TT-F-14888]
p0232 N73-21150
Analysis of operator participation
p0413 N73-30081

ZARKESHEV, E. G.
Neurophysiological characteristics of isolated structures of the cerebral cortex
p0248 A73-30570

ZASLAVSKAIA, R. M.
Diurnal rhythm oscillations of fat metabolism indices in healthy young men
p0117 A73-19646

ZATOKOVENKO, V. F.
Influence of electric stimulation of the hypothalamus on catecholamine, phosphorated compound, and cholesterol levels
p0383 A73-40284

ZAVALOVA, N. D.
The problem of human efficiency in automated control systems
p0079 A73-16410

ZAWIDSKI, R.
On the influence of individual elastic properties of the human body on the results of arterial pressure measurement
p0099 N73-14072

ZEBOUNI, F. H.
Sudden incapacitation in flight.
p0326 A73-36847

ZELIKSON, B. B.
The role of the elastic properties of brain and spine cavities in hyperemia compensation
p0322 A73-36572

ZELLER, C.
Determination of lesion threshold in the guinea pig auditory area due to sonic boom [ISL-33/72]
p0369 N73-27966

ZELLNER, H. B.
An investigation of the syncoder as a pulse interval processing device [AD-746007]
p0606 N73-10169

ZEPLER, E. E.
Human response to transportation noise and vibration.
p0310 A73-35328

ZERZAWY, H.
A programmable four channel system for long-time radio telemetry of biomedical parameters.
p0052 A73-14280
Radiotelemetry of direct bloodpressure measurements in aorta, pulmonary artery and heart.
p0053 A73-14291

ZHAROVSKII, S. N.
Nonlinear method of analyzing electroencephalograms
p0580 A73-10661

ZHEIFETS-TETELBAUM, B. A.
The use of oxygen in the decompression and remedial recompression of divers [DRIC-TRANS-3095]
p0334 N73-26069

ZHIDKOV, V. V.
Peculiarities of human skin reactions to lotions of different composition during hypokinesia
p0444 N73-33034

ZHIGAILO, T. L.
Effect of hypercapnia on the electrical discharges of the bulbar respiratory neurons and motor neuron ganglia of respiratory muscles
p0084 A73-16735
Effects of vagotomy on the impulse activity of respiratory neurons
p0276 A73-31160

ZHIRONKIN, A. G.
Effect of increased atmospheric pressure on the dynamics of free oxygen content in animal muscle tissues
p0576 A73-10156
Mathematical analysis of the responses of the human respiratory system to hypoxia and hypercapnia
p0126 A73-21322
Conditions of ascertaining and conditioning man's capacity to distinguish the composition of a breathing atmosphere
p0182 N73-19090

ZHUIKOV, IU. S.
Ability of a human operator to estimate the probability characteristics of alternative stimuli
p0394 A73-41893

ZHUKOVS'KII, L. I.
Some compensatory adjustment reactions of the blood circulation system in pulmonary pathology
p0280 A73-31623

ZHURAVLEV, V. A.
The combined influence of microwave radiation and an adverse climate on the organism
p0277 A73-31170

ZHURAVLEVA, A. I.
New data in the use of therapeutic exercise in diseases of the peripheral vessels [NASA-TT-F-15043]
p0374 N73-29045

ZIJLSTRA, W. G.
Analysis of indicator distribution in the determination of cardiac output by thermal dilution.
p0125 A73-21216
Choice of detection site for the determination of cardiac output by thermal dilution - The injection-thermistor-catheter.
p0125 A73-21217

ZIKRIA, B. A.
A system for continuous measurement of gas exchange and respiratory functions.
p0577 A73-10172

ZINACHEV, M. M.
Single unit reactions in the visual cortex of the unanesthetized rabbit to the light flashes of different intensities.
p0204 A73-26719

ZIMIN, A. B.
Food consumption and morphological indices of blood in white mice with the replacement of air nitrogen by inert gases in a pressurized chamber
p0442 N73-33020

ZIMIN, IU. I.
Role of adrenalin and alpha-receptor deactivation in reactions of hemopoietic organs to stress
p0117 A73-19644

ZIMKIN, N. V.
Interrelation between hardness, viscosity, strength, and bioelectric activity of human muscles
p0576 A73-10155

ZIMKINA, A. M.
Stability criteria in manifestations of the activity of the central nervous system in humans
p0575 A73-10152

ZIMMERMANN, I.
Blood plasma contamination of the lung alveolar surfactant obtained by various sampling techniques.
p0391 A73-41637

ZINCHENKO, V. P.
Formation of visual images. Studies of stabilized retinal images /revised edition/.
p0406 A73-42869
The human factor in contemporary technology [JPRS-58792]
p0260 N73-22050
Ergonomics: Principles and recommendations, no. 1 [NASA-TT-F-716]
p0413 N73-30079
Ergonomic prerequisites for artistic designing
p0413 N73-30080
Analysis of operator participation
p0413 N73-30081
Designing control system information models
p0414 N73-30082

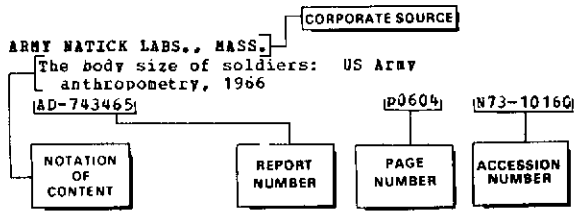
ZINGERMAN, A. M.
Heart activity characteristics in a human operator during a control process
p0164 A73-23806

ZIMPOLO, G.
Micrococcus pierantonii. New species of photogenic bacteria of the luminous organ of Rondeletia Minor NAEF
[NASA-TT-F-14439] p0608 N73-11072
ZLATIN, B. S.
Acetylcholinesterase activity of hypothalamic and cortical structures under pharmacological effects
p0170 A73-24597
The nature of chemoreception in posterior hypothalamic structures
p0382 A73-40279
ZLOBINSKII, B. M.
Combustibility and toxicity of metals and alloys, selected articles
[AD-764287] p0418 N73-31003
ZLOBINSKII, V. B.
Combustibility and toxicity of metals and alloys, selected articles
[AD-764287] p0418 N73-31003
ZMUDZINSKI, J.
Sodium Na-24 and potassium K-42 availability for sweat production after intravenous injection and their handling by sweat glands.
p0348 A73-37757
ZOERGIEBEL, P.
Solid state AgCl detectors for nuclear tracks with on- and off-response at choice - Applications to life sciences.
p0398 A73-42179
ZOLOTAREV, P. IA.
Some physiological mechanisms of alpha-rhythm frequency fluctuations in man under conditions of relative rest
p0429 A73-44717
ZORINA, N. G.
Principal characteristics of a method for regenerating the oxygen in pressurized chambers based on electrolysis with use of solid electrolytes
p0441 N73-33015
ZUBAVIN, V. E.
Application of multichannel rheography to physiological studies on a centrifuge
p0088 A73-17693
Influence of the packing and of certain conditions of usage on the medications in portable emergency medicine stores
p0209 A73-27720
Use of multichannel rheography in physiological investigations on a centrifuge
p0065 N73-12094
Effect of packaging and some use conditions for drugs in pharmacies carrying emergency reserves
p0218 N73-20114
ZUBENKOVA, E. S.
Evaluation of the functional state of granulocytopoiesis using a pyrogenal test
p0255 N73-22009
ZUCKERMAN, H.
The physiological adaptation to unilateral semicircular canal inactivation
p0111 N73-15151
ZUEVA, V. A.
Effects of chronic irradiation of dogs with Co-60 gamma rays on the level of auto-antibodies
p0208 A73-27706
ZUKHBAIA, T. M.
Proliferative activity of bone marrow cells in dogs exposed to chronic and repeated acute gamma irradiation
p0208 A73-27708
ZUKHBAIA, T. M.
Proliferative activity of bone marrow cells in dogs during chronic gamma irradiation in combination with repeated acute exposures
p0217 N73-20102
ZUMFT, W. G.
Effect of nitrite and nitrate on chlorophyll fluorescence in green algae.
p0287 A73-33226
ZUYEVA, V. A.
Effect of chronic irradiation of dogs by Co60 gamma rays on the level of autoantibodies
p0216 N73-20100
ZVEREVA, Z. A.
Preliminary description of seasonal plankton collections at Molodezhnaya station
p0379 N73-29363
ZWICK, H.
Deficits in visual function associated with laser irradiation.
p0169 A73-24563
Spectral deficits in visual acuity due to laser irradiation
[AD-750394] p0114 N73-15173
ZYRIANOVA, T. D.
Some biomechanical properties of the pelvic girdle of man
p0045 A73-13743
ZYUZIN, I. K.
Change in calcium content in human bone tissue accompanying thermal stress
p0444 N73-33033

Corporate Source Index

AEROSPACE MEDICINE AND BIOLOGY / *a continuing bibliography* JANUARY 1974
1973 Cumulative Index

Typical Corporate Source Index Listing



The Notation of Content (NOC), rather than the title of the document, is used to provide a more exact description of the subject matter. The NASA or AIAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of *Aerospace Medicine and Biology*. The page number indicates the exact page on which the abstract is found. If applicable, a report number is also included as an aid in identifying the document.

A

ABERDEEN PROVING GROUND, MD.
Noise and blast
p0106 N73-15106
ABT ASSOCIATES, INC., CAMBRIDGE, MASS.
NASA's contributions to patient monitoring, appendix
[NASA-CR-131538] p0230 N73-21138
ACADEMY OF SCIENCES (USSR), MOSCOW.
Investigative methods in space biology and medicine: Transmission of medical data
[NASA-TT-F-14996] p0338 N73-27057
Interaction between man and biosphere
[JPRS-59366] p0339 N73-27065
Biological life support systems
[NASA-TT-F-15005] p0339 N73-27067
Safety of life and health of crews of spacecraft and space stations in emergency situations
[NASA-TT-F-14997] p0339 N73-27068
Study of immunological reactivity
[NASA-TT-F-15089] p0418 N73-30999
Evaluation of gas exchange and reaction of the cardiovascular and respiratory systems to physical work
[NASA-TT-F-15090] p0437 N73-31997
Measurement of the arterial pressure by the tachooscilloscope method after N. N. Savitskiy
[NASA-TT-F-15088] p0439 N73-32016
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
Structure and functions of central mechanisms of reinforcement
p0449 N73-33067
ACADEMY OF SCIENCES OF THE UKRANIAN SSR, KIEV (USSR).
Modeling complex behavior with the aid of M-automata
p0448 N73-33059
Experimental study of a model of motor behavior
p0448 N73-33060
Model of the organization of goal-directed behavior
p0448 N73-33061
ACUREX CORP., MOUNTAIN VIEW, CALIF.
High pressure space suit glove
[NASA-CR-114535] p0151 N73-17120
Analysis of the thermal response of protective fabrics
[AD-759525] p0337 N73-26095
ADELPHI INST. OF MARINE SCIENCES, OAKDALE, N.Y.
Correlation of in situ fluorescence and bioluminescence with Biota in the New York Bight
[RM-568J] p0252 N73-21978
ADVANCED ROCKET TECHNOLOGY, IRVINE, CALIF.
Investigation of biowaste resistojets for space station application
[NASA-CR-112159] p0112 N73-15161
ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, PARIS (FRANCE).
Aeromedical aspects of vibration and noise
[AGARDOGRAPH-151] p0148 N73-17098
Special aspects of aviation occupational medicine. Cardiovascular and nervous system effects of bromotrifluoromethane
[AGARD-R-599] p0149 N73-17106
Colour vision requirements in different operational roles
[AGARD-CP-99] p0179 N73-19065
Performance and biodynamic stress - Influence of interacting stresses on performance
[AGARD-CP-101] p0188 N73-19143
Predictability of motion sickness in the election of pilots
[AGARD-CP-109] p0225 N73-21092
The use of medication and drugs in flying personnel
[AGARD-CP-108] p0226 N73-21102
Technical evaluation report, conclusion, recommendations
p0226 N73-21103
Ophtalmologic surveillance of absorbed antimalaria drugs in systems of navigation personnel
p0228 N73-21122
Current status in aerospace medicine
[AGARD-CP-110] p0265 N73-23057
AEROJET MEDICAL AND BIOLOGICAL SYSTEMS, EL MONTE, CALIF.
Microbial ecology measurement system
[NASA-CR-128731] p0149 N73-17107
Development of a laboratory prototype water quality monitoring system suitable for use in zero gravity
[NASA-CR-112267] p0222 N73-20144
Tape cassette bacteria detection system
[NASA-CR-134035] p0417 N73-30996
AERONAUTICAL RESEARCH LABS., MELBOURNE (AUSTRALIA).
The protective performance of crash helmets
[ARL/SM-NOTE-390] p0420 N73-31014
AERONAUTICAL SYSTEMS DIV., WRIGHT-PATTERSON AFB, OHIO.
Pilot performance as a function of three types of altitude displays
[ASD-TR-72-63] p0074 N73-13117
AEROSPACE CORP., EL SEGUNDO, CALIF.
IR laser radiation eye protector
[AD-753080] p0178 N73-18142
AEROSPACE MEDICAL DIV., BROOKS AFB, TEX.
USAF Technical Objective Document (TOD): Aerospace biotechnology
[AD-759277] p0300 N73-25135
AEROSPACE MEDICAL RESEARCH LABS., WRIGHT-PATTERSON AFB, OHIO.
The analysis of L-3-hydroxytyrosine (L-dopa) and its metabolites
[AD-745944] p0066 N73-12105
The role of ammonia in the metabolic effects of hydrazine
[AD-749519] p0100 N73-14077
Bibliography of research reports and publications issued by the Human Engineering Division, April 1946 - December 1970
[AD-749933] p0103 N73-14103
The acute toxicity of chlorine pentafluoride
[AD-751452] p0138 N73-16078
The toxicology of some commercial fluorocarbons
[AD-751429] p0138 N73-16079

The toxicity of pyrolysis products from a chlorotrifluoroethylene-ethylene copolymer (Halar resin)
[AD-751436] p0138 N73-16080
Dichloromethane hepatotoxicity in mice with continuous and intermittent inhalation exposures
[AD-751434] p0138 N73-16081
Effects of methylene chloride exposure on the spontaneous activity of mice
[AD-751435] p0139 N73-16082
Pathological lesions caused by methylisobutylketone
[AD-751444] p0139 N73-16083
Guides for short-term exposures of the public to air pollutants
[AD-751438] p0139 N73-16084
The acute toxicity of brief exposures to hydrogen fluoride, hydrogen chloride, nitrogen dioxide, and hydrogen cyanide singly and in combination with carbon monoxide
[AD-751442] p0139 N73-16085
Animal pathology resulting from long term exposure to low levels of monomethylhydrazine
[AD-751441] p0139 N73-16086
Chronic exposure studies with monomethylhydrazine
[AD-751440] p0139 N73-16087
Basis for establishing guides for short term exposure of the public to air pollutants
[AD-751437] p0140 N73-16088
Cardiopulmonary effects of fluorocarbon compounds
[AD-751426] p0140 N73-16089
Cardiac toxicity of aerosol propellants
[AD-751425] p0140 N73-16090
Cardiovascular effects of fluorocarbon exposure
[AD-751427] p0140 N73-16091
Effects of monomethylhydrazine on blood and cerebrospinal fluid glucose in anesthetized monkeys
[AD-751232] p0140 N73-16092
A study of liver microsomal cytochromes following chronic exposure to dichloromethane
[NASA-TM-X-69101] p0176 N73-18128
Continuous animal exposure to methylene-chloride
[NASA-TM-X-69099] p0177 N73-18129
Continuous exposure of animals to methylisobutylketone
[NASA-TM-X-69100] p0177 N73-18130
Analysis of soluble beryllium by gas chromatography
[AD-753112] p0177 N73-18131
Color vision requirements for air crew personnel of the future
[AMRL-TR-71-116] p0180 N73-19076
Two experiments on the effects of combined heat, noise and vibration stress
[AMRL-TR-71-113] p0188 N73-19146
Combined effects of noise and vibration on cognitive and psychomotor performance
[AMRL-TR-71-115] p0188 N73-19147
Performance measurement using pilot controlled Gz maneuvering with simulated operational task
[AMRL-TR-72-3] p0189 N73-19154
Very low altitude detection of small stationary targets at very slow speeds: A simulation study using strip photography
[AD-754928] p0222 N73-20146
Monte Carlo simulation of degraded man-machine performance
p0270 N73-23899
Human performance capability in the aircraft acceleration environment of aerial combat
[AD-759174] p0300 N73-25134
Preflight heat stress and recovery
[AD-759173] p0338 N73-27060
Tactile Information Presentation (TIP)
[AD-761796] p0369 N73-27969
Background and development of Boyle's Law altitude suits
[AD-761797] p0369 N73-27970
Tracking performance during whole body vibration with side mounted and center mounted control sticks
[AD-761798] p0370 N73-27971
Description and use of a measurement system for air bag acoustic transient data acquisition and analysis
[AD-761836] p0370 N73-27977
An annotated bibliography of United States Air Force applied physical anthropology
[AD-762287] p0371 N73-27978
The Aerospace Medical Research Laboratory guide to medical monitoring of environmental stress
[AD-760813] p0377 N73-29061
Performance of the anti-G valve when subjected to varying lateral forces
[AD-760814] p0377 N73-29062

AIR CORPORATIONS JOINT MEDICAL SERVICE (BEA/BOAC), LONDON (ENGLAND).
Aspects of sleep regulation in airline pilots
p0226 N73-21107

AIR FORCE AVIONICS LAB., WRIGHT-PATTERSON AFB, OHIO.
Limitations of unaided eye visual target detection from high speed low flying aircraft correlated with target background environment
[AD-759651] p0300 N73-25136

AIR FORCE HUMAN RESOURCES LAB., BROOKS AFB, TEX.
Evaluation of a device to train forward air controllers to communicate target locations
[AD-751292] p0142 N73-16103

AIR FORCE HUMAN RESOURCES LAB., WILLIAMS AFB, ARIZ.
Evaluation of airborne audio-video recordings as a tool for training in the A-7D tactical fighter
[AD-744041] p0605 N73-10161

AIR FORCE INST. OF TECH., WRIGHT-PATTERSON AFB, OHIO.
A method for calculating aircrew radiation dose
[AD-745084] p0593 N73-10079
A system for validating human reliability data
[AD-744551] p0594 N73-10085
Input noise approximation in tracker modeling
p0598 N73-10110
An investigation of the syncoder as a pulse interval processing device
[AD-746007] p0606 N73-10169
The USAF aircraft maintenance manpower process: 1947 through 1972
[AD-760082] p0337 N73-26097
Pilot parameter identification via the extended Kalman filter
[AD-764694] p0441 N73-32026

AIR FORCE SYSTEMS COMMAND, WRIGHT-PATTERSON AFB, OHIO.
Application of manual control theory to the study of biological stress
p0602 N73-10138
The functional state of the visual and vestibular analyzers of those who work with small doses of ionizing emissions
[AD-750499] p0109 N73-15132
The question of ground training of flying personnel
[AD-749621] p0113 N73-15168
Soviet cybernetics review (selected articles)
[AD-751145] p0178 N73-18143
Vestibular reactions methods of study and the effects on various environmental factors
[AD-753511] p0220 N73-20132
Physical and radiobiological investigations on artificial earth satellites
[AD-756771] p0294 N73-24126
Combustibility and toxicity of metals and alloys, selected articles
[AD-764287] p0418 N73-31003
The effect of various types of failures of a human operator on the effectiveness of his work
[AD-764937] p0441 N73-32028

AIR FORCE WEAPONS LAB., KIRTLAND AFB, N.MEX.
Waterfowl migration corridors
[AD-748114] p0073 N73-13109

AIRESEARCH MFG. CO., LOS ANGELES, CALIF.
Temperature
p0104 N73-15094
Tektite 2 habitability research program: Day-to-day life in the habitat
[NASA-CR-130034] p0140 N73-16094
Objective techniques for psychological assessment
[NASA-CR-128945] p0295 N73-24136
Intermediate water recovery system
[NASA-CR-128983] p0337 N73-26094
Development of design information for molecular-sieve type regenerative CO2-removal systems
[NASA-CR-2277] p0366 N73-27948
Space shuttle environmental and thermal control/life support system study
[NASA-CR-134009] p0415 N73-30091

AIRESEARCH MFG. CO., TORRANCE, CALIF.
Study and development of a cryogenic heat

exchanger for life support systems
[NASA-CR-124301] p0340 N73-27071
ALL-UNION SCIENTIFIC RESEARCH INST. FOR AESTHETIC STYLING IN ENGINEERING, MOSCOW (USSR).
Ergonomics: Principles and recommendations, no. 1
[NASA-TT-F-716] p0413 N73-30079
AMERICAN CYANAMID CO., BOUND BROOK, N.J.
Plastic materials for eye protection from lasers
[AD-752594] p0152 N73-17127
AMERICAN INST. FOR RESEARCH, SILVER SPRING, MD.
Psychobiological factors associated with monotony tolerance
[AD-747272] p0071 N73-13098
AMERICAN INST. FOR RESEARCH, WASHINGTON, D.C.
Development of a standardized battery of performance tests for the assessment of noise stress effects
[NASA-CR-2149] p0148 N73-17102
Human engineering guide to equipment design (revised edition)
[AD-758339] p0296 N73-24140
AMERICAN INST. OF AERONAUTICS AND ASTRONAUTICS, NEW YORK.
AIAA employment workshops. Volume 2: An analytic report on some effects of twenty-two workshops
[PB-209367] p0604 N73-10159
AIAA employment workshops, Volume 1
[PB-209366] p0605 N73-10168
AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.
Glass ocular laser protective filters
[AD-755406] p0261 N73-22057
ANALYTICAL RESEARCH LABS., INC., MONROVIA, CALIF.
Evaluation of spacecraft toxic gas removal agents
[NASA-CR-134013] p0415 N73-30092
ANTHROPOLOGY RESEARCH PROJECT, YELLOW SPRINGS, OHIO.
Anthropometry of US Army aviators, 1970
[AD-743528] p0605 N73-10162
ARGONNE NATIONAL LAB., ILL.
Research on oxygen recovery systems for use in space capsules
[NASA-CR-114573] p0300 N73-25130
Radiological and Environment Research Division. Part 2: Biology and medicine
[ANL-7960-PT-2] p0334 N73-26068
ARMED FORCES RADIOBIOLOGY RESEARCH INST., BETHESDA, MD.
Neutron effectiveness for causing incapacitation in monkeys
[AD-742076] p0594 N73-10080
Blood PO2 and pH in monkeys after incapacitating doses of ionizing radiation
[AD-756681] p0109 N73-15134
ARMY AEROMEDICAL RESEARCH LAB., FORT RUCKER, ALA.
Human head and neck response to impact acceleration
[AD-747988] p0072 N73-13106
Research in support of aviation medicine
[AD-749456] p0108 N73-15129
Aircrew color vision requirements
p0179 N73-19073
The effects of INH chemoprophylaxis on aviator performance
p0227 N73-21111
ARMY COLD REGIONS RESEARCH AND ENGINEERING LAB., HANOVER, N.H.
The effect of low visibility on the performance of vehicle operators
[AD-749248] p0260 N73-22051
ARMY COMBAT DEVELOPMENTS COMMAND MEDICAL SERVICE AGENCY, FORT SAM HOUSTON, TEX.
Fatique in sustained tactical operations
[AD-746643] p0611 N73-11090
ARMY ENVIRONMENTAL HYGIENE AGENCY, EDGEWOOD ARSENAL, MD.
Hazards from high intensity lamps and arcs
p0145 N73-17071
New standards for ultraviolet radiation
p0148 N73-17094
Evaluation of Hadron Model 112 Laser Safety Eyeshields, January - March 1973
[AD-759921] p0337 N73-26099
ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER, CHARLOTTESVILLE, VA.
A comparative evaluation of the energy of lethal doses of gamma radiation, visible light and the energy of cellular basal metabolism
[AD-746750] p0072 N73-13102
Parachute oxygen apparatus
[AD-756554] p0296 N73-24141
ARMY MEDICAL RESEARCH AND NUTRITION LAB., DENVER, COLO.
Effects of altitude on the Cebus apella monkey
[AD-745891] p0610 N73-11085
ARMY MEDICAL RESEARCH LAB., FORT KNOX, KY.
Color naming latencies with brief exposures of individual Stroop and control stimuli
[AD-745106] p0596 N73-10094
Auditory feedback and conditioning of the single motor unit
[AD-745107] p0605 N73-10165
Vision: Monocular, bi-ocular, binocular
[AD-749450] p0101 N73-14085
Brightness of a capacitor discharge lamp: Bloch's law for brief flashes
[AD-749452] p0104 N73-14109
Research in support of military medicine
[AD-749440] p0108 N73-15130
A versatile, inexpensive generator of periodic visual stimuli
[AD-754562] p0223 N73-20149
ARMY MISSILE COMMAND, REDSTONE ARSENAL, ALA.
The design of analysis of a human body motion measurement system
[AD-751134] p0142 N73-16104
Human factors/human engineering (HFHE)
[AD-763168] p0415 N73-30094
ARMY NATICK LABS., MASS.
The body size of soldiers: US Army anthropometry, 1966
[AD-743465] p0604 N73-10160
ARMY RESEARCH INST. FOR THE BEHAVIORAL AND SOCIAL SCIENCES, ARLINGTON, VA.
Effect of photo degradation on interpreter performance
[AD-763908] p0440 N73-32024
ARMY TANK-AUTOMOTIVE COMMAND, WARREN, MICH.
The effects of vibration on vision as applied to military vehicles
[AD-750345] p0114 N73-15172
ARMY TEST AND EVALUATION COMMAND, ABERDEEN PROVING GROUND, MD.
Laser safety goggles
[AD-746208] p0606 N73-10170
AUTONETICS, ANAHEIM, CALIF.
Analysis of a display and control system man-machine interface concept. Volume 1: Final technical report
[NASA-CR-128576] p0603 N73-10145
Analysis of a display and control system man-machine interface concept. Volume 2: Appendices A and B
[NASA-CR-128577] p0603 N73-10146
Analysis of a display and control system man-machine interface concept. Volume 3: Appendices C, D and E
[NASA-CR-128578] p0603 N73-10147
Analysis of a display and control system, man-machine interface concept. Volume 4: Appendix F
[NASA-CR-128579] p0603 N73-10148

B

BAIRD-ATOMIC, INC., BEDFORD, MASS.
A study of marine luminescence signatures, part 1
[NASA-CR-114578] p0297 N73-25114
Compendium of marine luminescence signatures, part 2 (appendix C)
[NASA-CR-114579] p0298 N73-25115
BARRY WRIGHT CORP., WATERTOWN, MASS.
Effect of vertical active vibration isolation on tracking performance and on ride qualities
[NASA-CR-2146] p0066 N73-12109
BATTELLE MEMORIAL INST., RICHLAND, WASH.
Annual report for 1971 to the OSAEC Division of Biology and Medicine. Volume 2: Physical sciences. Part 2: Radiological sciences
[BNWL-1651-VOL-2-PT-2] p0137 N73-16069
BATTELLE-NORTHWEST, RICHLAND, WASH.
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-130538] p0150 N73-17114
Kinetic aspects of bone mineral metabolism
[NASA-CR-128816] p0186 N73-19130
The measurement of radiation exposure of astronauts by radiochemical techniques

[NASA-CR-131984] p0267 N73-23070
Measurement of radiation exposure of astronauts by radiochemical techniques
[NASA-CR-133378] p0365 N73-27939
Annual report for 1971 to the USAEC Division of Biology and Medicine. Volume 2: Physical sciences. Part 1: Atmospheric sciences
[BNWL-1651-VOL-2-PT-1] p0446 N73-33044

BAYLOR UNIV., HOUSTON, TEX.
Effects of stress upon psychophysiological responses and performance following sleep deprivation
[NASA-CR-128620] p0608 N73-11073
The medical aspects of space flight seen from the viewpoint of nuclear medicine
p0174 N73-18106
Adrenocorticotrophic hormone levels in ground based studies
p0174 N73-18109
Prodromal disease: Immune responses of the host macrophage system to humoral factors
[NASA-CR-133455] p0365 N73-27938

BECKMAN INSTRUMENTS, INC., ANAHEIM, CALIF.
Preparative electrophoresis experiment design
[NASA-CR-123972] p0101 N73-14090

BECKMAN INSTRUMENTS, INC., FULLERTON, CALIF.
Further development and testing of the metabolic gas analyzer
[NASA-CR-128842] p0190 N73-19160

BEHAVIORAL TECHNOLOGY CONSULTANTS, SILVER SPRING, MD.
Statistical evaluation of time series analysis techniques
[NASA-CR-134011] p0417 N73-30995

BETA INDUSTRIES, INC., DAYTON, OHIO.
A statistical evaluation of the injury potential of a square wave energy absorber
[AD-745919] p0612 N73-11102
Inflatable restraint concept for general aviation aircraft
[FAA-RD-73-3] p0299 N73-25127

BIOTECHNOLOGY, INC., ARLINGTON, VA.
Bioastronautics data book, second edition
[NASA-SP-3006] p0104 N73-15091

BIOTECHNOLOGY, INC., FALLS CHURCH, VA.
Measurement of operator workload in an information processing task
[NASA-CR-2150] p0070 N73-13087
Habitability issues in long duration undersea and space missions
[NASA-CR-130537] p0151 N73-17123
Short term hearing loss in general aviation operations, phase 1, part 1
[NASA-CR-130987] p0173 N73-18095
Use of spectral analysis procedures for the evaluation of drug effects
p0228 N73-21116
Protection against hearing loss in general aviation operations, phase 2
[NASA-CR-133303] p0341 N73-27078
A review of problems encountered in the recovery of navy aircrewmen under combat conditions
[AD-761636] p0370 N73-27972
A review of the influence of physical condition parameters on a typical aerospace stress effect: Decompression sickness
[NASA-CR-135495] p0418 N73-31002

BOEING CO., PHILADELPHIA, PA.
Helicopter crew/passenger vibration sensitivity -
p0591 N73-10019

BOEING CO., SEATTLE, WASH.
Degradation of learned skills. A review and annotated bibliography
[NASA-CR-128611] p0603 N73-10152
Degradation of learned skills. Effectiveness of practice methods on simulated space flight skill retention
[NASA-CR-128612] p0603 N73-10153
Occupational medical trends in the 70's from industrial view
p0146 N73-17077
Degradation of learned skills: Effectiveness of practice methods on visual approach and landing skill retention
[NASA-CR-128912] p0269 N73-23086
Man-machine considerations in the development of a cockpit for an advanced tactical fighter
p0270 N73-23905

BOLT, BERANEK, AND NEWMAN, INC., CAMBRIDGE, MASS.
A control theory model for human decision making
p0597 N73-10107
Analytic evaluation of display requirements for approach to landing
p0599 N73-10121
Prediction and analysis of human performance in a VTOL hover task
p0601 N73-10134

BRITISH AIRCRAFT CORP. (OPERATING) LTD., BRISTOL (ENGLAND).
Modeling of random human visual search performance based on the physical properties of the eye
p0190 N73-19961
Some psychometrics in relation to target acquisition
p0191 N73-19974

BROWN UNIV., PROVIDENCE, R.I.
Mathematical modeling of the glucose homeostasis in humans
[NASA-CR-129171] p0606 N73-11056

BRUNSWICK NAVAL AIR STATION, ME.
Automation of the problem oriented medical record
p0147 N73-17087

BUNKER-RAMO CORP., WESTLAKE VILLAGE, CALIF.
Training effectiveness evaluation of naval training devices. Part 1: A study of the effectiveness of a carrier air traffic control center training device
[AD-751556] p0141 N73-16101
Human engineering for the Air Force control display program
[AD-754916] p0223 N73-20148

BUREAU OF MINES, PITTSBURGH, PA.
Response variations of a microphone worn on the human body
[BM-RI-7810] p0376 N73-29058

BUREAU OF SPORT FISHERIES AND WILDLIFE, WASHINGTON, D.C.
Effect of sonic boom on fish
[FAA-RD-73-29] p0219 N73-20121

C

CAEN UNIV. (FRANCE).
The optimization of form
p0227 N73-21114

CALIFORNIA STATE UNIV., LONG BEACH.
An 8-channel, ultrasonic, marine bio-telemetry transmitter utlizing C/MOS (Complementary Metal-Oxide Semiconductor) digital integrated circuits
[AD-748605] p0074 N73-13119

CALIFORNIA UNIV., BERKELEY.
Enzyme activity in terrestrial soil in relation to exploration of the Martian surface
[NASA-CR-128399] p0591 N73-10059
Estimation of automobile-driver describing function from highway tests using the double steering wheel
p0601 N73-10132
Physiological responses to environmental factors related to space flight
[NASA-CR-129518] p0066 N73-12107
Proceedings of the 6th Berkeley Symposium on Mathematical Statisitics and Probability. Volume 5: Darwinian, neo-Darwinian, and non-Darwinian evolution
[NASA-CR-131508] p0229 N73-21131

CALIFORNIA UNIV., BERKELEY. LAWRENCE BERKELEY LAB.
Biological effects due to single accelerated heavy particles and the problems of nervous system exposure in space
[LBL-1011] p0186 N73-19134

CALIFORNIA UNIV., DAVIS.
The foundations of space biology and medicine. Volume 2: Ecological and physiological bases of space biology and medicine. Part 3: Effect on the organism of dynamic flight factors. Chapter 1: Principles of gravitational biology
[NASA-CR-128471] p0593 N73-10075
Circadian phase relationships in monkeys
p0224 N73-21088
Systems analysis of physiological performance related to stresses such as those experienced in high performance air craft
[AD-754970] p0230 N73-21133

CALIFORNIA UNIV., IRVINE.
Biocybernetics: An interactive man-machine

interface
[AD-746179] p0612 N73-11101
CALIFORNIA UNIV., LOS ANGELES.
Manual control models of industrial management
p0598 N73-10115
The effects of attention sharing in a dynamic dual task environment
p0602 N73-10140
Effects of hydrazine on electrophysiology, behavior and runway performance in the cat
[AD-746914] p0609 N73-11081
Effects of monomethylhydrazine (MMH) on evoked cerebral neuroelectric responses
[AD-746302] p0610 N73-11082
Underwater work performance and work tolerance
[AD-747761] p0072 N73-13107
Physiology of chimpanzees in orbit. Part 1: Scientific Report
[NASA-CR-131374] p0220 N73-20129
Physiology of chimpanzees in orbit. Part 2: Interface document
[NASA-CR-131397] p0220 N73-20130
Study of electrocutaneous parameters relevant to dynamic tactual communication systems
p0230 N73-21135
CALIFORNIA UNIV., SAN DIEGO.
Vision
p0105 N73-15104
CALIFORNIA UNIV., SANTA BARBARA.
Physiological performance related to multiple stresses such as those experienced in the Air Force operations
[AD-759565] p0341 N73-27082
CATHOLIC UNIV. OF AMERICA, WASHINGTON, D.C.
The motivating influence of retest and repeated dietary counseling on cholesterol reduction
p0146 N73-17081
Genetic and metabolic variability in autotrophic and heterotrophic bacteria
[NASA-CR-130807] p0252 N73-21979
CENTRAL RESEARCH INST. FOR PHYSICS, BUDAPEST (HUNGARY).
Whole body counter efficiency calculations for distributed sources in a human phantom
[KFKI-72-30] p0067 N73-12114
CENTRE D'ESSAIS EN VOL, BRETIGNY-SUR-ORGE (FRANCE).
Physiological modifications during operational flights of long duration
p0189 N73-19152
Modifications of performance under certain medications: Proposed measuring method
p0227 N73-21110
Effect of altitude on cerebral blood flow patterns in the smoker and non-smoker
p0229 N73-21125
CENTRE D'ETUDES ET DE RECHERCHES DE MEDECINE AERONAUTIQUE, PARIS (FRANCE).
Possibility of predicting predisposition of motion sickness in the selection of pilots
p0225 N73-21094
CENTRE DE MEDECINE AERONAUTIQUE, BRUSSELS (BELGIUM).
Standardization of test and categorization of color vision anomalies in military circles, and methods used by employees to track down their problems
p0179 N73-19071
The selection and surveillance of student pilots with motion sickness in the Belgian Armed Forces
p0226 N73-21099
CENTRE PRINCIPAL D'EXPERTISES MEDICALES DU PERSONNEL NAVIGANT, PARIS (FRANCE).
Examination of chromatic sense in French aerial forces
p0179 N73-19068
CENTRO DI STUDI E RICERCHE DI MEDICINA AERONAUTICA E SPAZIALE, ROME (ITALY).
Study on some air force operational activities in Italy, with reference to thermal conditions and their effects on acceleration tolerance and psychomotor performance
p0266 N73-23068
CHEMTRIC, INC., ROSEMONT, ILL.
Upgrading and extended testing of the MSC integrated water and waste management hardware
[NASA-CR-128878] p0222 N73-20142
CHICAGO UNIV., ILL.
Hierarchical hybrid control of manipulators: Artificial intelligence in large scale integrated circuits
[NASA-CR-131403] p0224 N73-20156
CINCINNATI UNIV., OHIO.
Investigation of ocular hazard from lasers in human subjects
[AD-747058] p0071 N73-13099
CITY COLL. OF THE CITY OF NEW YORK.
Digital modeling of human operator dynamics via class of Liapunov functions
p0598 N73-10111
Design modification of electrophoretic equipment
p0231 N73-21140
CITY UNIV. OF NEW YORK.
Nonlinear and digital man-machine control systems modeling
[NASA-CR-132294] p0377 N73-29060
CIVIL AEROMEDICAL INST., OKLAHOMA CITY, OKLA.
A comparative study of female and male air traffic controller trainees
[FAA-AM-72-22] p0611 N73-11094
Self-estimates of distractibility as related to performance decrement on a task requiring sustained attention
[FAA-AM-72-25] p0612 N73-11096
Binaural processing of speech in light aircraft
[FAA-AM-72-31] p0102 N73-14094
A preliminary study of maximal control force capability of female pilots
[FAA-AM-72-27] p0112 N73-15157
GPSS/360 computer models to simulate aircraft passenger emergency evacuation
[FAA-AM-72-30] p0150 N73-17119
Auditory effects of noise on air crew personnel
[FAA-AM-72-32] p0185 N73-19125
Attrition-retention rates of air traffic control trainees recruited during 1960 - 1963 and 1968 - 1970
[FAA-AM-72-33] p0222 N73-20140
Simulated sonic booms and sleep: Effects of repeated booms of 1.0 PSF
[FAA-AM-72-35] p0333 N73-26057
Transient blindness due to the combined effects of mevinphos and atropine
[FAA-AM-73-4] p0338 N73-27055
Subtle changes in brain functions produced by single doses of mevinphos (phosdrin)
[FAA-AM-73-3] p0338 N73-27056
Job attitudes of air traffic controllers: A comparison of three air traffic control specialties
[FAA-AM-73-2] p0339 N73-27066
Alcohol and disorientation related responses. 6: Effects of alcohol on eye movements and tracking performance during laboratory angular accelerations about the yaw and pitch axes
[FAA-AM-72-34] p0416 N73-30989
COAST GUARD, SAN FRANCISCO, CALIF.
MLR/SERV (Motor Life Boat/Surface Effect Rescue Vehicle)
[AD-761460] p0370 N73-27974
COAST GUARD, WASHINGTON, D.C.
PACSAR 1972: Report of the Pacific International Air and Surface Search and Rescue Seminar
[AD-761756] p0369 N73-27967
COLORADO STATE UNIV., FORT COLLINS.
Hypoxia, gas narcosis, and metabolic response to argon and nitrous oxide
[NASA-CR-133214] p0298 N73-25120
Mechanisms of inert gas narcosis
[NASA-CR-62096] p0445 N73-33038
COLORADO UNIV., DENVER.
Pulmonary gas transport and the regulation of ventilation at rest and exercise
[AD-746979] p0071 N73-13092
Time course of respiratory adaptation to high altitude
[AD-755192] p0267 N73-23075
COLUMBIA UNIV., NEW YORK.
Range and time estimates of dynamic visual target
[AD-747271] p0071 N73-13094
A new field-laboratory methodology for assessing human response to noise
[NASA-CR-2224] p0176 N73-18124
CONNECTICUT COLL., NEW LONDON.
Development of techniques for measuring performance in the undersea environment
[AD-748036] p0072 N73-13108
CONNECTICUT UNIV., STORRS.
Human operator dynamics for aural compensatory

tracking
p0602 N73-10142
CONTROL DATA CORP., ST. PAUL, MINN.
Air-to-air visual detection data
[FAA-RD-73-40] p0231 N73-21145
Summary of visual detection data, part 2
[CDC-JL-5] p0231 N73-21147
Summary of visual detection data taken during the ATA/CAS flight tests
p0231 N73-21148
CORNELL UNIV., ITHACA, N.Y.
Studies of photosynthetic energy conversion
[COO-3162-9] p0070 N73-13091
COX CORONARY HEART INST., DAYTON, OHIO.
Experiences with physical conditioning programs in middle-aged men
p0143 N73-17051

D

DAYTON UNIV. RESEARCH INST., OHIO.
Bone strength and in-flight mechancial stresses
[AD-754982] p0221 N73-20134
A proposed distributed parameter model for studying the effects of acceleration forces upon the arterial system
[AD-756530] p0294 N73-24128
DEFENCE AND CIVIL INST. OF ENVIRONMENTAL MEDICINE, DOWNSVIEW (ONTARIO).
A brief guide to the units and the interpretation of blood alcohol measurements
[DCIEM-TM-848] p0175 N73-18120
Measurement of susceptibility to motion sickness
p0225 N73-21093
A study of energy expenditure, dehydration and health in Canadian troops during a spring exercise in the subarctic: Exercise Northern Ramble
[DCIEM-882] p0376 N73-29056
DEFENCE RESEARCH ANALYSIS ESTABLISHMENT, OTTAWA (ONTARIO).
Some results of a test at Canadian forces base uplands of a measure of work and responsibility
[DRAE-M45] p0260 N73-22049
DEFENCE RESEARCH BOARD, OTTAWA (ONTARIO).
DRB Aviation Medical research Unit reports. Volume 2: 1968-1971
[DR-215] p0606 N73-11057
The functional significance of semicircular canal size
[AMRU-R-69-1] p0606 N73-11058
Characteristics of neural transmission from the semicircular canal to the vestibular nuclei of cats
[AMRU-R-70-2] p0606 N73-11059
Dynamic asymmetry in neural components of the vestibular system
[AMRU-R-69-2] p0607 N73-11060
Response of semicircular canal dependent units in vestibular nuclei to rotation of a linear acceleration vector without angular acceleration
[AMRU-R-70-4] p0607 N73-11061
A quantitative study of vestibular adaptation in humans
[AMRU-R-70-1] p0607 N73-11062
Origin significance and amelioration of coriolis illusions from the semicircular canals: A non-mathematical appraisal
[AMRU-R-70-6] p0607 N73-11063
Effect of changes in illumination level on electro-oculography (EOG)
[AMRU-R-71-1] p0607 N73-11064
A model of eye movements induced by head rotation
[AMRU-R-71-3] p0607 N73-11065
Vestibulo-ocular responses in man during sleep
[AMRU-R-70-3] p0608 N73-11066
Organization of neural control of the vestibulo-ocular reflex arc
[AMRU-R-71-2] p0608 N73-11067
Neural response of the vestibular system to translational acceleration
[AMRU-R-69-3] p0608 N73-11068
Man-machine integration: A long term look
[AMRU-R-68-3] p0608 N73-11069
DRB Aviation Medical Research Unit reports, volume 1, 1964-1968
[DR-208-VOL-1] p0109 N73-15136
Dynamics of the Semicircular canals compared in yaw, pitch and roll
p0109 N73-15137
Predominance of anti-compensatory oculomotor response during rapid head rotation
p0109 N73-15138
The critical dependence of semi-circular canal function upon its physical dimensions
p0109 N73-15139
Disturbance of oculomotor control in flight
p0110 N73-15140
Spatial and dynamic aspects of visual fixation
p0110 N73-15141
Theoretical man machine interaction which might lead to loss of aircraft control
p0110 N73-15142
Influence of eye lid movement upon electro-oculographic recording of vertical eye movements
p0110 N73-15143
The vestibular contribution to stabilization of the retinal image
p0110 N73-15144
The Interdependence of clinical neurology and neurophysiology: An historical review of the vestibulo-ocular reflex
p0110 N73-15145
Vestibular inaptitude in the environments of flight and space
p0110 N73-15146
Interactions between optokinetic and vestibulo-ocular responses during head rotation in various planes
p0110 N73-15147
Predominant direction of gaze during slow head rotation
p0111 N73-15148
Dependence of visual tracking capability upon stimulus predictability
p0111 N73-15149
Neural reflection of vestibular mechanics
p0111 N73-15150
The physiological adaptation to unilateral semicircular canal inactivation
p0111 N73-15151
Some aviation medical aspects of flight crew fatique
p0111 N73-15152
A dynamic model of the semicircular canal
p0111 N73-15153
From land to space in a generation: An evolutionary challenge
p0111 N73-15154
DEFENCE RESEARCH ESTABLISHMENT OTTAWA (ONTARIO).
Relationships between dosimeter response and absorbed dose for 0.66-MeV gamma rays and for 2.9-MeV neutrons
[AD-743005] p0593 N73-10077
DEFENCE RESEARCH INFORMATION CENTRE, ORPINGTON (ENGLAND).
Lesions of the nervous system in decompression sickness
[AD-743330] p0593 N73-10076
Disorders of the nervous system in decompression disease
[AD-744298] p0594 N73-10086
Calculation of the thermal resistance of the air layers in air-permeable clothing
[AD-746037] p0612 N73-11099
Assessment of the thermal resistance of clothing
[DRIC-TRANS-2920] p0067 N73-12117
Chemical protection in mixed gamma-neutron irradiation with different neutron contributions in the absorbed dose
[DRIC-TRANS-2961] p0108 N73-15124
A study of the radioprotective action of a polymer salt of cystamine and sulphopropyl ester of dextran
[DRIC-TRANS-2963] p0108 N73-15125
Mute gas bubbles and their role in decompression pathology
[AD-748229] p0108 N73-15126
Assessment of thermal insulation properties of clothing
[DRIC-TRANS-2921] p0113 N73-15166
Application of the oxygen method in algotoxic investigations
[DRIC-TRANS-2991] p0187 N73-19139
The effect of some radioprotective preparations on the motor and evacuator function of the gastrointestinal tract of healthy and

irradiated rats
[DRIC-TRANS-2962] p0229 N73-21130
The influence of simazine on the photosynthetic pigments of green algae
[DRIC-TRANS-2992] p0258 N73-22040
Decompression disorders after exposure to safe pressure or safe altitude
[DRIC-TRANS-3035] p0259 N73-22041
Voice and hearing in the system of acoustic orientation of animals
[DRIC-TRANS-3056] p0298 N73-25121
The use of oxygen in the decompression and remedial recompression of divers
[DRIC-TRANS-3095] p0334 N73-26069
DEFENSE DOCUMENTATION CENTER, ALEXANDRIA, VA.
Performance factors in underwater environment
[AD-748060] p0074 N73-13122
Performance measurement
[AD-749100] p0100 N73-14080
Man machine interaction
[AD-752800] p0178 N73-18141
DELAWARE STATE COLL., DOVER.
The examination of urine samples for pathogenic microbes by the luciferase assay for ATP. 1: The effect of the presence of fungi, fungal like bacteria and kidney cells in urine samples
[NASA-CR-130797] p0173 N73-18096
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, PHOENIX, ARIZ.
Services provided in support of the planetary quarantine requirements
[NASA-CR-132022] p0265 N73-23056
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, BAD GODESBERG (WEST GERMANY).
Decompression experiments with animals as a function of the water balance of the organism
[DLR-FB-71-20] p0099 N73-14075
Oxygen therapy. Observations on the behavior of enzyme activities in plasma after breathing oxygen at high pressure
[DLR-FB-71-96] p0112 N73-15163
Pressure gradient measurements in the bodies of animals with air blast injuries
[DLR-FB-71-72] p0113 N73-15164
The effects of hypoxia and acceleration on enzyme activities in erythrocytes and plasma
[DLR-FB-72-71] p0137 N73-16070
Studies on the influence of Pervitin on the incidence of gas bubbles in blood after decompression
[DLR-FB-72-66] p0175 N73-18117
Changes of the circadian rhythm of the body temperature after transmeridian flights
[DLR-FB-73-01] p0178 N73-18140
The prediction of flight safety hazards from drug induced performance decrements with alcohol as reference substance
p0227 N73-21112
Changes in the diurnal variation of simulated pilot activity after time shift due to air travel through several time zones
[DLR-FB-73-25] p0298 N73-25122
Current scientific papers from the Aerospace Medical Institute
[DLR-FB-73-15] p0367 N73-27951
Wing anomalies of the flour beetle tribolium confusum caused by O-G simulation
p0367 N73-27952
A new method to record heart rate and respiratory rate inflight on cockpit crews
p0367 N73-27953
Relations between sociometric variables and criteria of proficiency or behavior of student pilots
p0367 N73-27954
A new method to salvage sunken ships and to work underwater in great depth
p0367 N73-27955
Psychodiagnostic problems in the selection of aviation personnel in developing countries, taking applicants from Yemen as examples
p0368 N73-27956
Tasks of concentration under psychical stress
p0368 N73-27957
Resynchronization of diurnal performance rhythms after transmeridian flights
p0368 N73-27958
Extreme aeroembolism and its successful treatment in hyperbaric chamber
p0368 N73-27959
The glutamic acid metabolism of the brain and its modification through hyperbaric oxygenation
p0368 N73-27960
Elementary physics and application of O-G simulation according to H. J. Muller
p0368 N73-27961
Diagnosis and prognosis of pilot reaction and resistance to psychical stress
p0368 N73-27962
Interrelationship between gravity and mechanical impedance of supine humans
p0368 N73-27963
Changes in the 24-hour rhythm after two transatlantic flights in rapid sequence
p0369 N73-27964
Effect of defined shock waves on test animals
p0369 N73-27965
Effects of time shift on diurnal rhythms of 17-hydroxy corticosteroide
[DLR-FB-73-58] p0412 N73-30070
Contribution of the anticipation stress to total flight stress and its dependence on diurnal rhythm, measured by physiological parameters
[DLR-FB-72-39] p0412 N73-30071
Behavior of cell enzymes, glucose, cholesterol, and 17-hydroxycorticosteroids in blood during physical exercise and as a function of training condition
[DLR-FB-72-48] p0412 N73-30072
Circadian rhythm variations of circulation respiration, and catabolism under flight stress conditions
[DLR-FB-72-49] p0413 N73-30073
Change in circadian rhythm of psychomotor performance after transmeridian flights
[DLR-FB-73-52] p0421 N73-31022
Effect of fibrinogen concentration on the rheodynamical behavior of human blood
[DLR-FB-73-54] p0446 N73-33046
Hematologic studies after rapid decompression
[DLR-FB-73-63] p0446 N73-33047
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, BERLIN (WEST GERMANY).
Assessment of cockpit displays
[DGLR-PAPER-72-97] p0074 N73-13118
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, OBERPFAFFENHOFEN (WEST GERMANY).
On the dependence of information display quality requirements upon human characteristics and pilot/automatics relations
p0600 N73-10126
Experience gained in determining horizontal standard visibility
[DLR-FB-71-22] p0067 N73-12118
Research at the DFVLR in the field of environmental protection. Part 2: Noise abatement, water and landscape, technology
[DLR-MITT-72-15] p0232 N73-21153
DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
Control information in visual flight
p0600 N73-10125
DOW CHEMICAL CO., MIDLAND, MICH.
Toxicological evaluation of a beryllium motor exhaust product
[AD-756531] p0259 N73-22042
DREXEL UNIV., PHILADELPHIA, PA.
Control analysis and design of demand regulated liquids breathing systems
p0252 N73-21976
DUKE UNIV., DURHAM, N.C.
Theoretical aspects of color vision
p0179 N73-19066
Effect of elimination of nitrogen and/or hypoxia or restricted visual environment on color vision and range of accommodation
[NASA-CR-128896] p0258 N73-22037
DUNLAP AND ASSOCIATES, INC., SANTA MONICA, CALIF.
Effect of a predictor display on carrier landing performance. Phase b: Display mechanization and preliminary evaluation
[AD-750294] p0103 N73-14102

E

EASTERN MICHIGAN UNIV., YPSILANTI, MICH.
Mycological studies housed in the Apollo 16 microbial ecology evaluation device
p0292 N73-24110

ENERGY RESEARCH CORP., BETHEL, CONN.
Carbon dioxide adsorbent study
[NASA-CR-114661] p0420 N73-31013
ENVIRONMENTAL HEALTH LAB., MCCLELLAN AFB, CALIF.
The industrial hygiene survey
[AD-751897] p0151 N73-17126
ENVIRONMENTAL PROTECTION AGENCY, RESEARCH TRIANGLE PARK, N.C.
Toxicology of atmospheric sulfur dioxide decay products
p0099 N73-14071
ESSEX CORP., ALEXANDRIA, VA.
Applications of space teleoperator technology to the problems of the handicapped
[NASA-CR-133357] p0367 N73-27949
The role of man in flight experiment payload missions. Volume 1: Results
[NASA-CR-135487] p0421 N73-31020
The role of man in flight experiment payload missions. Volume 2: Appendices
[NASA-CR-135488] p0421 N73-31021
EXOTECH SYSTEMS, INC., FALLS CHURCH, VA.
Scientific and technical services in the development of planetary quarantine measures for automated spacecraft
[NASA-CR-131291] p0220 N73-20126
Scientific and technical services directed toward the development of planetary quarantine measures for automated spacecraft
[NASA-CR-133202] p0334 N73-26066
Scientific and technical services directed toward the development of planetary quarantine measures for automated spacecraft
[NASA-CR-135795] p0445 N73-33040
EXPLOSIVES RESEARCH AND DEVELOPMENT ESTABLISHMENT, WALTHAM ABBEY (ENGLAND).
The effect of ignition of small quantities of initiators in laboratory vessels of glass and polythene
[ERDE-TRANS-1] p0295 N73-24137

F

FAIRCHILD REPUBLIC DIV., FARMINGDALE, N.Y.
Spacecraft sanitation agent development
[NASA-CR-128591] p0603 N73-10149
Personal hygienic concerns in long term space flight
[NASA-CR-128929] p0295 N73-24132
FEDERAL AVIATION ADMINISTRATION, WASHINGTON, D.C.
G effects on the pilot during aerobatics
[FAA-AM-72-28] p0609 N73-11075
The 1971 US civil airmen statistics
[AD-754271] p0223 N73-20153
The current status of drug use in civil aviation personnel
p0226 N73-21104
Summary of air-to-air visual detection data, part 1
p0231 N73-21146
FEDERAL CITY COLLEGE, WASHINGTON, D.C.
Design modification of electrophoretic equipment
p0231 N73-21140
FIGHTER BOMBER WING (31ST), KERPEN/ERFT (WEST GERMANY).
Use of medication and drugs, especially alcohol, by flying personnel
p0229 N73-21124
FLORIDA STATE UNIV., TALLAHASSEE.
Test anxiety: Situationally specific or general
[AD-746453] p0066 N73-12104
Research in photobiology and photochemistry
[NASA-CR-133459] p0365 N73-27937
FLORIDA UNIV., GAINESVILLE.
Charged particle impact phenomena for radiobiological applications
[ORO-3798-52] p0070 N73-13090
Quantitative analysis of the physiological condition and level of alertness of man in an isolated environment
[AD-751272] p0142 N73-16105
The contribution of the external auditory meatus to human auditory sensitivity
[AD-751664] p0177 N73-18132
FLUGWISSENSCHAFTLICHE FORSCHUNGSANSTALT, MUNICH (WEST GERMANY).
Breeding monkeys for biomedical research
p0266 N73-23063
FLUGZEUGFUEHRERSCHULE, KLEIN HEIDORN (WEST GERMANY).
Tranquilizers and aviation
p0228 N73-21123
FLYING PERSONNEL RESEARCH COMMITTEE, LONDON (ENGLAND).
The incidence of backache among aircrew and groundcrew in the Royal Air Force
[AD-745177] p0597 N73-10102
A theoretical model of the utricular otolith and its response to angular motion with respect to an acceleration in shear
[FPRC-1315] p0608 N73-11070
Colour vision requirements in different operational roles in the Royal Air Force
[FPRC/1319] p0366 N73-27942
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, ROME (ITALY).
A study of the agroclimatology of the highlands of eastern Africa
[WMO-339] p0446 N73-33045
FOOD AND DRUG ADMINISTRATION, CINCINNATI, OHIO.
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-129272] p0065 N73-12101
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-131103] p0185 N73-19122
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-133223] p0333 N73-26058
Ecology and thermal inactivation of microbes in and on interplanetary space vehicle components
[NASA-CR-133224] p0333 N73-26059
FORSCHUNGSINSTITUT FUER ANTHROPOTECHNIK, MECKENHEIM (WEST GERMANY).
Development and optimization of a nonlinear multiparameter model for the human operator
p0597 N73-10106
A proposal for preprocessing, reduction, and selection of visual information in airborne flight simulation
p0600 N73-10128
FRANKFORD ARSENAL, PHILADELPHIA, PA.
Spectral deficits in visual acuity due to laser irradiation
[AD-750394] p0114 N73-15173
FRANKLIN INST. RESEARCH LABS., PHILADELPHIA, PA.
Cooperative Investigation of the Caribbean and Adjacent Regions, Adjacent Regions, CICAR, volume 2 CICAR. Volume 2: Bibliography on marine biology
p0261 N73-23022
Cooperative Investigation of the Caribbean and Adjacent Regions, CICAR, volume 3: Bibliography on marine geology and geophysics
p0261 N73-23023
FRAUNHOFER-GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG E. V., GRAFSCHAFT (WEST GERMANY).
NMR spectroscopic and calorimetric investigation of ribonuclease A and T1
[BMVG-FBWT-72-7] p0137 N73-16071
Antidotes for alkyl phosphate poisoning: Structure-effect relations in vivo and in vitro
[BMVG-FBWT-72-8] p0137 N73-16072
Calorimetric investigation of enzymes. Thermodynamic parameter determination of the interaction between ribonuclease T1 inhibitors and substrates
[BMVG-FBWT-72-12] p0137 N73-16073
Nuclear resonance investigation of enzymes. PMR spectra of ribonuclease inhibitor complexes
[BMVG-FBWT-72-13] p0137 N73-16074
Pharmacological investigation of the parasympatholytical effect of mono and bisquaternary pyridinium compounds on the isolated guinea pig ileum
[BMVG-FBWT-72-14] p0138 N73-16075
Skin protection against high toxic phosphoric acid esters
[BMVG-FBWT-72-15] p0138 N73-16076
Biological effects of fast neutrons. Mortality and changes in blood cell count of mice after complete exposure to fast neutrons and X-rays
[BMVG-FBWT-72-16] p0138 N73-16077
Inhibiting and activating effect of mono- and bi-quaternary pyridine oxime reactivators and related compounds on structure-bound acetyl-choline esterase in vitro

[BMVG-FBWT-72-9] p0187 N73-19138
FREIBURG UNIV. (WEST GERMANY).
Reactivation of phosphorylated acetylcholin-esterase with quaternary pyridine oximes: Determination of influencing factors
[BMVG-FBWT-72-32] p0187 N73-19137

G

GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
Study of physiological and behavioral response to transitions between rotating and nonrotating environments
[NASA-CR-2130] p0611 N73-11093
GENERAL ELECTRIC CO., PHILADELPHIA, PA.
Experiments evaluating compliance and force feedback effect on manipulator performance
[NASA-CR-128605] p0603 N73-10151
Convectionless electrophoretic separation of biological preparations
[NASA-CR-123920] p0606 N73-11055
Reaction tester
[NASA-CASE-MSC-13694-1] p0073 N73-13114
Domestic applications for aerospace waste and water management technologies p0075 N73-13849
IMBLMS phase B4, additional tasks 5.0. Microbial identification system
[NASA-CR-128747] p0186 N73-19132
Air conditioned suit
[NASA-CASE-LAR-10076-1] p0221 N73-20137
Water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Appendices
[NASA-CR-134027] p0420 N73-31016
Water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report
[NASA-CR-134028] p0420 N73-31017
GEOLOGICAL SURVEY, WASHINGTON, D.C.
Application of remote sensing techniques for appraising changes in wildlife habitat p0142 N73-16396
GEORGE WASHINGTON UNIV., WASHINGTON, D.C.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] p0612 N73-11097
Dysbaric osteonecrosis: An annotated bibliography with preliminary analyses
[AD-747258] p0071 N73-13100
A bibliography of wildlife movements and tracking systems
[NASA-CR-130380] p0133 N73-16040
Bibliography of scientific publications and presentations relating to planetary quarantine: 1966 - 1971
[NASA-CR-131889] p0258 N73-22038
Scientific publications and presentations relating to planetary quarantine. Volume 5: The 1972 supplement
[NASA-CR-131817] p0297 N73-25112
GEOSCIENCE, LTD., SOLANA BEACH, CALIF.
A urine volume measurement system
[NASA-CR-128726] p0141 N73-16095
GIESSEN UNIV. (WEST GERMANY).
Stimulation of panting by isolated heating of the spinal column in the wake dog
[NASA-TT-F-14998] p0338 N73-27054
GOODYEAR AEROSPACE CORP., AKRON, OHIO.
Effect of training on coordinate determination of SLAR (Side-Looking Airborne Radar) imaged features
[AD-762342] p0371 N73-27979
GRAMBLING COLL., LA.
The effect of continuous low dose-rate gamma irradiation on cell population kinetics of lymphoid tissue
[NASA-CR-135723] p0437 N73-31999
GRUMMAN AEROSPACE CORP., BETHPAGE, N.Y.
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 1: Final report summary
[NASA-CR-128657] p0190 N73-19158
Study of water recovery and solid waste processing for aerospace and domestic applications. Volume 2: Final report
[NASA-CR-128658] p0190 N73-19159
Correlation of in situ fluorescence and bioluminescence with Biota in the New York Bight
[RM-568J] p0252 N73-21978

H

HAMILTON STANDARD DIV., UNITED AIRCRAFT CORP., WINDSOR LOCKS, CONN.
Waste collection subsystem development
[NASA-CR-133977] p0366 N73-27945
Ice pack heat sink subsystem - Phase 1, Volume 1
[NASA-CR-114624-VOL-1] p0419 N73-31006
HAMILTON STANDARD, WINDSOR LOCKS, CONN.
Central waste processing system
[NASA-CR-134048] p0440 N73-32021
HARDING COLL., SEARCY, ARK.
An evaluation of the effects of bed rest, sleep deprivation and discontinuance of training on the physical fitness of highly trained young men
[NASA-CR-134044] p0438 N73-32008
An evaluation of the Exer-Genie exerciser and the Collins pedal mode ergometer for developing physical fitness
[NASA-CR-134046] p0440 N73-32023
HARDIN-SIMMONS UNIV., ABILENE, TEX.
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission
[NASA-CR-130009] p0135 N73-16059
A study of psychrophilic organisms isolated from the manufacture and assembly areas of spacecraft to be used in the Viking mission, 1 January - 30 June 1973
[REPT-2] p0333 N73-26063
HARVARD SCHOOL OF PUBLIC HEALTH, BOSTON, MASS.
Studies of the visual perception of substance
[AD-749372] p0100 N73-14084
Programmed multiphasic health testing p0145 N73-17074
On enhancing visual perceptions of solar flare precursors
[AD-760802] p0377 N73-29063
HARVARD UNIV., BOSTON, MASS.
Long term clinical relationships of the ventricular premature beat p0146 N73-17083
HARVARD UNIV., CAMBRIDGE, MASS.
Development of sensitive and direct methods for measuring plasma aldosterone and catecholamine concentrations p0174 N73-18111
Parathyroid hormone, calcitonin, and vitamin D p0174 N73-18112
HAWKER SIDDELEY AVIATION, LTD., HATFIELD (ENGLAND).
Human factors in low weather operation of transport aircraft p0270 N73-23901
HEADQUARTERS ARMY AVIATION, MIDDLE WALLOP (ENGLAND).
Helicopter flying and colour vision p0180 N73-19075
HELLENIC AIR FORCE GENERAL HOSPITAL, ATHENS (GREECE).
Management of asymptomatic carriers of Hepatitis-Associated-Antigen (HAA) in Hellenic Air Force personnel p0265 N73-23060
HONEYWELL, INC., MINNEAPOLIS, MINN.
A design procedure and handling quality criteria for lateral directional flight control systems p0601 N73-10137
HOPITAL D'INSTRUCTION DES ARMEES, VERSAILLES (FRANCE).
Antidiabetic medications and navigation personnel p0228 N73-21120
HOUSTON UNIV., TEX.
Factors concerned with sanitary landfill site selection: General discussion
[NASA-CR-128744] p0189 N73-19157
Development of germ-free plants and tissue culture
[NASA-CR-128947] p0293 N73-24122
A cardiovascular control system simulation for exercise p0446 N73-33049
HOWARD UNIV., WASHINGTON, D.C.
Prolonged weightlessness (300 plus days) and cardiac performance in primates. 1: Neuro-humoral mechanisms in the control of cardiac and vascular performance in conscious animals
[NASA-CR-129512] p0063 N73-12075
Summer Biomedical Engineering Institute 1972
[NASA-CR-130809] p0178 N73-18135

The 1972 Summer Institute for Biomedical Engineering
[NASA-TM-X-66214] p0231 N73-21139
Hematological viscometry
p0231 N73-21142
Indirect blood pressure measuring device
p0231 N73-21144
HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
Reaction time: A bibliography with abstracts. Supplement 2, with subject index
[AD-745416] p0596 N73-10095
Pupillometry using an advanced-design oculometer
[AD-752121] p0150 N73-17116
Some aspects of individual differences in schematic concept formation
[AD-744781] p0260 N73-22052
The effect of helmet form on hearing: Free-field thresholds
[AD-745121] p0260 N73-22053
Perception of symmetrically distributed weight on the head
[AD-748412] p0261 N73-22056
HUMAN FACTORS RESEARCH, INC., GOLETA, CALIF.
Active sonar target detection and reporting: Perceived consequences and their effects on performance
[AD-750761] p0114 N73-15174
HUMAN FACTORS RESEARCH, INC., LOS ANGELES, CALIF.
Some observations from a literature review to anticipate biological problems that might arise in sustained and continuous operations
p0271 N73-23989
HUMAN RESOURCES RESEARCH ORGANIZATION, ALEXANDRIA, VA.
Determining training device requirements in fixed wing aviator training
[AD-744447] p0604 N73-10158
Combat job requirements for the air cavalry aeroscout pilot and aeroscout observer
[AD-755505] p0441 N73-32027

I

ILC INDUSTRIES, INC., DOVER, DEL.
Study of space shuttle EVA/IVA support requirements. Volume 3: Requirements study for space shuttle pressure suits
[NASA-CR-133993] p0419 N73-31008
ILLINOIS UNIV., CHICAGO.
Further observations on the relationship of EMG and muscle force
p0599 N73-10117
ILLINOIS UNIV., SAVOY.
Research and the future of engineering psychology
[AD-748237] p0074 N73-13121
Simulator motion as a factor in flight-director display evaluation
[AD-749370] p0075 N73-13126
Detecting slow changes in system dynamics
[AD-748243] p0102 N73-14097
Enhancement of human effectiveness in system design, training, and operation
[AD-748239] p0102 N73-14098
Response surface methodology design variants useful in human performance research
[AD-748236] p0102 N73-14099
Assessment of pilotage error in airborne area navigation procedures
[AD-754214] p0223 N73-20150
A parametric study of pilot performance with modified aircraft control dynamics, varying navigational task complexity, and induced stress
[AD-764760] p0441 N73-32025
Enhancement of human effectiveness system design, training, and operation
[AD-764761] p0450 N73-33075
ILLINOIS UNIV., URBANA.
Auditory system
p0105 N73-15105
A study of visual shape perception
p0446 N73-33050
INDIAN NATIONAL SCIENTIFIC DOCUMENTATION CENTRE, NEW DELHI.
Scientific creativity, part 1
[TT-70-57147-1] p0413 N73-30074
Scientific creativity, part 2
[TT-70-57147-2] p0413 N73-30075
Scientific creativity, part 3
[TT-70-57147-3] p0413 N73-30076
INDIANA STATE UNIV., TERRE HAUTE.
Investigation of the neurological correlates of information reception
[NASA-CR-132047] p0293 N73-24124
INDIANA UNIV. MEDICAL CENTER, INDIANAPOLIS.
A study of the effects of whole-body plus or minus a(z) vibration on postural sway
[AD-745580] p0596 N73-10098
INDIANA UNIV., BLOOMINGTON.
Combined environmental stresses
p0106 N73-15110
Control mechanisms in physiological rhythms
[NASA-CR-131153] p0179 N73-19064
Physiological adjustments to environmental factors
[AD-753913] p0261 N73-22059
INFORMATICS, INC., ROCKVILLE, MD.
Soviet biocybernetics bibliography, January - May 1972
[AD-750129] p0113 N73-15167
INSTITUT FRANCO-ALLEMAND DE RECHERCHES, ST. LOUIS (FRANCE).
Influence of pressure rise time of an N shock wave, simulating the sonic boom on the cochlear and acoustically evoked potentials of the guinea pig
[ISL-31/72] p0365 N73-27940
Determination of lesion threshold in the guinea pig auditory area due to sonic boom
[ISL-33/72] p0369 N73-27966
INSTITUTE FOR PERCEPTION RVO-TNO, SOESTERBERG (NETHERLANDS).
Literature review of human macular absorption in the visible and its consequences for the cone receptor primaries
[IZF-1972-17] p0264 N73-23046
Calculations on the optical modulation transfer of the human eye for white light
[IZF-1973-2] p0264 N73-23047
Visually evoked cortical potentials to patterned stimuli in monkey and man
[IZF-1972-24] p0264 N73-23049
Psychophysical experiments on tuning curves and two-tone inhibition
[IZF-1972-25] p0264 N73-23050
Are subjective probabilities probabilities?
[IZF-1973-3] p0268 N73-23076
Paced and selfpaced work in continuous reaction time tasks
[IZF-1973-5] p0268 N73-23077
Musical interval recognition with simultaneous tones
[IZF-1972-20] p0268 N73-23078
INSTITUTE OF AVIATION MEDICINE, FLIEGERHORST (WEST GERMANY).
Some critical comments on the measurement of in-flight strains
p0188 N73-19148
INSTITUTE OF AVIATION MEDICINE, FUERSTENFELDBRUCK (WEST GERMANY).
Practical aspects of color vision and its disturbances
p0179 N73-19067
Physiological studies of fatigue in activities requiring mental concentration in hot climate, the influence of positioning and sensorial irritation
p0189 N73-19155
Test results about the effectiveness of Metixenum applied against motion sickness
p0226 N73-21100
The impact of diurnal rhythm on drug dosing and drug evaluation
p0228 N73-21119
Syringomyelia and flying fitness
p0266 N73-23061
INSTITUTE OF PHARMACOLOGY, OSLO (NORWAY).
Comparison of mental and psychomotor effects of diazepam and ethanol
p0229 N73-21126
INSTRUMENT FLIGHT CENTER, RANDOLPH AFB, TEX.
ATC angle of attack training
[AD-757243] p0269 N73-23090
INTERNATIONAL BUSINESS MACHINES CORP., ARMONK, N.Y.
Breathing metabolic simulator
p0075 N73-13850
INTERNATIONAL BUSINESS MACHINES CORP., NEW YORK.
Respiratory system
p0105 N73-15102

INTERNATIONAL LATEX CORP., DOVER, DEL.
Space suit
[NASA-CASE-MSC-12609-1] p0439 N73-32012
IOWA STATE UNIV. OF SCIENCE AND TECHNOLOGY, AMES.
Remote detection of moisture stress: field and laboratory experiments
p0068 N73-13070
ISRAEL PROGRAM FOR SCIENTIFIC TRANSLATIONS, LTD., JERUSALEM.
Absorption and utilization of solar energy by crops under various growth conditions
p0378 N73-29321
Distribution of the long-wave radiation fluxes and the radiation balance in plant cover
p0378 N73-29322
The radiation regime and the heat balance of a cotton field and the cotton crop
p0378 N73-29323
Determination of the light status in suspensions of algae
p0378 N73-29325
The theory of photosynthesis of algae
p0378 N73-29326
The photosynthesis of submerged aquatic plants as a function of the intensity of penetrating radiation
p0378 N73-29327
Radiation regime and the biometric indices of forest vegetation
p0378 N73-29328
Distribution of photosynthetically active radiation in the open and in the forest under various weather conditions
p0378 N73-29329
The incremental part of the organic matter balance of the underwood depending on the light conditions
p0378 N73-29330
The loss part of the organic matter balance in oak underwood depending on the light conditions
p0378 N73-29331
Measurements of the radiation characteristics in a multi-storeyed stand
p0378 N73-29332
Scattering of polarized light by plant cover elements
p0378 N73-29333
The brightness coefficient of the soil-vegetation system as a function of some parameters of the plant cover
p0378 N73-29334
Utilization of solar energy for photosynthesis by spring wheat cultivated in mountains
p0378 N73-29335
Measurements of the photosynthetically active radiation in forests with an intensity meter
p0379 N73-29337
Medical services
p0379 N73-29347
Medical investigations
p0379 N73-29348
oribatid mites (acarina, orbatei) in Antarctica
p0379 N73-29349
The personnel's vitamin balance at Vostok station
p0379 N73-29357
Diet at Vostok station
p0379 N73-29358
Hygienic investigations at Vostok station
p0379 N73-29359
Preliminary description of seasonal plankton collections at Molodezhnaya station
p0379 N73-29363
ISTITUTO SUPERIORE DI SANITA, ROME (ITALY).
A program for automatic analysis of biological parameters
[ISS-72/4] p0186 N73-19128

J

JAPAN BROADCASTING CORP., TOKYO.
NHK Technical Monograph No. 21
p0411 N73-30061
Control mechanism of the accommodation-vergence eye-movement system in human eyes
p0411 N73-30062
Roles of central and peripheral vision in pattern perception
p0411 N73-30063

JAPANESE AIR SELF-DEFENSE FORCE, TOKYO.
Anthropometry of JASDF personnel and its application for human engineering
p0101 N73-14091
JET PROPULSION LAB., CALIF. INST. OF TECH., PASADENA.
Planetary quarantine
[NASA-CR-129793] p0070 N73-13086
Microbiological sampling of spacecraft cabling, antennas, solar panels and thermal blankets
[NASA-CR-130383] p0149 N73-17109
Planetary quarantine annual review, space technology and research, July 1971 - July 1972
[NASA-CR-130861] p0176 N73-18123
Lipid-absorbing polymers
p0191 N73-19976
Unified approach to the biomechanics of dental implantology
p0191 N73-19977
The Mesa Arizona pupil tracking system
p0191 N73-19985
Planetary quarantine. Space research and technology
[NASA-CR-131845] p0258 N73-22039
Quarantine constraints as applied to satellites
[NASA-CR-132073] p0292 N73-24116
Spacecraft microbial burden reduction due to atmospheric entry heating: Jupiter
[NASA-CR-132072] p0292 N73-24117
Terrestrial quarantine considerations for unmanned sample return missions
[NASA-CR-132071] p0293 N73-24118
Raw liquid waste treatment system and process
[NASA-CASE-NPO-13224-1] p0419 N73-31011
Planetary quarantine. Space research and technology
[NASA-CR-135791] p0445 N73-33041
JOHANN-WOLFGANG-GOETHE-UNIVERSITAT, FRANKFURT AM MAIN (WEST GERMANY).
Biomedical experiments. Part A: Biostack experiment
p0232 N73-21761
The BIOSTACK experiment on Apollo 16
p0266 N73-23062
Effects of space vacuum and solar ultraviolet irradiation (254 nanometers) on the colony forming ability of Bacillus subtilis spores
p0291 N73-24108
JOHNS HOPKINS UNIV., BALTIMORE, MD.
Environmental radioactivity: Radiation effects at the cellular level
[NYO-3970-29] p0099 N73-14074
JOINT PUBLICATIONS RESEARCH SERVICE, ARLINGTON, VA.
Hygienic problems of the effect of microwave electromagnetic fields on the body
[JPRS-57209] p0593 N73-10073
Processing of medical information and assessment of work capacity in space flight
[JPRS-57417] p0602 N73-10144
Space biology and medicine, volume 6, no. 5, 1972
[JPRS-57517] p0063 N73-12076
Effect of thirty-day confinement of rats in an atmosphere with an increased oxygen content on the elimination of some gaseous products of vital functions
p0063 N73-12077
Biological role of atmospheric oxygen in the blood coagulation mechanism
p0063 N73-12079
DNA catabolism in the organs of rats under the influence of transversely directed accelerations
p0063 N73-12080
Quantitative evaluation of gas exchange of a continuous culture of higher plants as a link in a life support system
p0063 N73-12081
Selection of parameters of cardiovascular system ultrasonic Doppler probes
p0063 N73-12083
Relationship between impulse activity of bulbar respiratory neurons, electric activity of respiratory muscles and pulmonary ventilation accompanying depressed respiration
p0064 N73-12084
Results of electrogastrography during creation of moderate degrees of hypoxia in a pressure chamber
p0064 N73-12085
Possible role of antitissue autoantibodies in the protective mechanism of local shielding

during total irradiation
p0064 N73-12086
Some methods for evaluating the quality of the ergatic process during approach of space vehicles
p0064 N73-12087
Human cardiovascular system reactions to sign variable transverse accelerations
p0064 N73-12088
Diurnal rhythm of the content of biogenous amines (histamine, serotonin) in human blood under normal conditions and during altered work-sleep cycles
p0064 N73-12089
Cardiovascular system reactions in pilots with symptoms of atherosclerosis during professional work
p0064 N73-12090
Gas chromatographic investigations of volatile products of human metabolism accompanying reduced food intake and starvation
p0064 N73-12091
Vestibular reactions during exposure to coriolis accelerations under hypoxic conditions
p0065 N73-12092
Use of multichannel rheography in physiological investigations on a centrifuge
p0065 N73-12094
Prolonged monitoring of human cardiac bioelectric activity during ground experiments and in space flight
p0065 N73-12095
Heat regulation reactions in animals in a helium-oxygen atmosphere
p0065 N73-12096
Microflora in a closed cabin in a three-day experiment with human subjects at a reduced temperature and high relative humidity
p0065 N73-12098
Selections from Voyenno-Meditsinskiy Zhurnal no. 8, 1972
[JPRS-57541] p0068 N73-13072
Study of some psychic functions of aquanauts during prolonged exposure to increased pressure
p0068 N73-13073
Use of a skin analysor as a communication channel in controlling activity (review of the literature)
p0069 N73-13074
Mood as a factor in an operator's performance
p0069 N73-13075
Methods and technique of machine analysis of biological structures
[JPRS-57418] p0070 N73-13085
Psychological compatibility in interplanetary flight
[JPRS-57878] p0106 N73-15113
Space Biology and Medicine, volume 6, no. 6, 1972
[JPRS-58010] p0133 N73-16041
Renal component of the antigravitational function in the body
p0133 N73-16043
Effect of accelerations on thiamine-S-35 distribution in the bodies of white mice
p0133 N73-16044
Morphological changes in the juxtaglomerular apparatus in the kidneys of rats during multihour exposure to accelerations in different directions
p0133 N73-16045
Heat regulation reactions in rats in a hypoxic atmosphere with nitrogen and helium dilution
p0134 N73-16046
Pathogenesis of some respiratory and circulatory reactions accompanying drops in barometric pressure
p0134 N73-16047
Morphological changes in the testes of dogs accompanying chronic and combined gamma irradiation
p0134 N73-16048
Effect of some drugs on fall-out and Bekhterev nystagmus
p0134 N73-16049
Effect of prolonged hypodynamic on rat biology
p0134 N73-16050
Radiation oxidation of water impurities in moisture-containing products of man's vital functions
p0134 N73-16051
Regulation of vertical posture after flight on the Soyuz-6 - Soyuz-8 ships and 120 day hypokinesia
p0134 N73-16052
Mechanics of respiration during simulation of weightlessness in an immersion medium
p0135 N73-16053
Analysis of some mechanisms of man's tolerance to lower body decompression
p0135 N73-16054
Effect of a gas mixture with an increased oxygen and carbon dioxide content on man's orthostatic tolerance
p0135 N73-16055
Diurnal dynamics of psychic performance during 72 hour continuous wakefulness
p0135 N73-16056
Use of sodium hydrocarbonate as a means for treating and preventing motion sickness
p0135 N73-16057
Characteristics of the effect of high mountain alpinism exercises on the human body
p0135 N73-16058
Rhythm of sleep and wakefulness in crews of the spaceships Soyuz 3-9 before, during and after exposure to spaceflight
[JPRS-58173] p0137 N73-16068
Emotional stress during spaceflight
[JPRS-58039] p0148 N73-17104
Problems of man's interaction with his natural environment
[JPRS-58113] p0151 N73-17121
Fourth All-Union Conference on Space Biology and Medicine
[JPRS-58345] p0176 N73-18125
Interaction of man-machine systems
[JPRS-58290] p0178 N73-18136
Some psychological engineering and psychophysiological aspects of the activity of a cosmonaut-operator during docking and ship-to-ship transfer
p0178 N73-18137
Interaction between man and an electronic computer in operational planning
p0178 N73-18138
Health evaluation of electron beam welding of beryllium bronze
p0190 N73-19531
Space biology and medicine, no. 1, 1973
[JPRS-58620] p0216 N73-20094
Physiological effect of the replacement of atmospheric nitrogen by inert gases at high and low temperature
p0216 N73-20095
Effect of antioxidants on the rate of deoxygenation of blood in animals exposed to a modified atmosphere
p0216 N73-20096
Dynamics of nitrogenous cerebral metabolites accompanying multiple hypothermia and subsequent self heating
p0216 N73-20097
Water mineral metabolism in animals subjected to restricted mobility
p0216 N73-20098
Increase in the tolerance of rats to a high temperature under the influence of thermal conditioning and drugs
p0216 N73-20099
Effect of chronic irradiation of dogs by Co60 gamma rays on the level of autoantibodies
p0216 N73-20100
Morphological changes in the liver in dogs accompanying chronic gamma radiation
p0217 N73-20101
Proliferative activity of bone marrow cells in dogs during chronic gamma irradiation in combination with repeated acute exposures
p0217 N73-20102
Dynamics of some characteristics of induced potential of the optical region in the cerebral cortex in rabbits under conditions of increasing hypoxia
p0217 N73-20103
Changes in composition of the peripheral blood during 18- and 24-day space flights
p0217 N73-20104

Change in blood content of gases when man is exposed to high ambient temperatures
p0217 N73-20105
Carbon monoxide content in exhaled air and blood carboxyhemoglobin in subjects confined to insulating protective gear
p0217 N73-20106
State of hemocoagulation and thrombocytes during hypokinesia after adaptation to high mountain conditions
p0217 N73-20107
Functional changes in systemic and regional (intracranial) circulation accompanying low accelerations
p0217 N73-20108
Role of social synchronizers in adaptation to unusual daily schedules
p0218 N73-20109
Bactericidal activity of the human skin at different times of day
p0218 N73-20110
Importance of photostimulation in the electroencephalographic study of fliers and candidates at flight schools
p0218 N73-20111
Equivalence of the effect of coriolis acceleration on receptors of the semicircular canals at some angular acceleration
p0218 N73-20112
Changes in visual functions after exposure to weak vestibular irritations
p0218 N73-20113
Effect of packaging and some use conditions for drugs in pharmacies carrying emergency reserves
p0218 N73-20114
Review: Biomedical problems in space flights. Index of Soviet and foreign literature
p0218 N73-20115
Conservation of natural resources and wild life [JPRS-58429]
p0222 N73-20145
Medical, other problems of space flight [JPRS-58678]
p0224 N73-21089
First the testers fly
p0224 N73-21090
Medical and biological problems of space flight
p0224 N73-21091
Spaceflight safety [JPRS-58781]
p0232 N73-21149
Space Biology and Medicine, volume 6, no. 4, 1972 [JPRS-57139]
p0254 N73-22002
Morphological changes in the suprarenals of rats during hypokinesia
p0254 N73-22003
Effect of a high oxygen content on the intensity of formation and elimination of some gaseous products of vital functions by rats
p0254 N73-22004
The mechanism of adaptation to hypoxic hypoxia
p0255 N73-22005
Time of retention of increased resistance to hypoxia in relation to different patterns of high mountain acclimatization
p0255 N73-22006
Effect of preliminary exposure to carbon monoxide on development of hypokinetic disorders in white rats
p0255 N73-22007
Effect of X-radiation in a dose of 25 and 250 R on transplantation immunity in mice characterized by weak and strong histoincompatibility systems
p0255 N73-22008
Evaluation of the functional state of granulocytopoiesis using a pyrogenal test
p0255 N73-22009
Thirty day experiment with simulation of the physiological effects of weightlessness
p0255 N73-22010
Organization of the experiments and overall condition of the subjects
p0255 N73-22011
Changes in cerebral, pulmonary and peripheral blood circulations
p0255 N73-22012
Variations in cardiac output and gas exchange at rest during hypokinesia
p0255 N73-22013
State of the visual analyzer under hypokinetic conditions
p0255 N73-22014
Study of reactions of human otorhinolaryngological organs during hypokinesia
p0256 N73-22015
Pulmonary volumes of human subjects restricted to an antiorthostatic position with application of different counteracting agents
p0256 N73-22016
Negative pressure on the lower part of the body as a method for preventing shifts associated with change in hydrostatic blood pressure
p0256 N73-22017
Physical training as a method for preventing the hypodynamic syndrome
p0256 N73-22018
Effect of physical training and electric stimulation on metabolism
p0256 N73-22019
Cerebral hemodynamics during 120 day clinostatic hypokinesia
p0256 N73-22020
Joint effect of stimulators and tranquilizers on performance of a man-operator
p0256 N73-22021
Determining copper, iron, cobalt, nickel and manganese in biological samples of plant origin
p0256 N73-22022
The human factor in contemporary technology [JPRS-58792]
p0260 N73-22050
Space biology and medicine, no. 2, 1973 [JPRS-59015]
p0262 N73-23024
Microbiological investigations during spaceflight
p0262 N73-23025
Investigation of some blood indices in white rats exposed to sixty day hypokinesia
p0262 N73-23026
Content of protein and nucleic acids in the tissues of animals during hypokinesia
p0262 N73-23027
Functional state of the skeletal muscles of rats during prolonged restriction of mobility (up to 120 days)
p0262 N73-23028
Effect of prolonged hypokinesia on some indices of energy metabolism in the skeletal muscles and in some internal organs
p0262 N73-23029
Cerebellar reactions during different regimes of rotation of animals on a centrifuge
p0262 N73-23030
Asymmetry of otolithic reactions in fish
p0262 N73-23031
Investigation of the effect of increased oxygen concentrations on chlorella metabolism
p0262 N73-23032
Effect of radioprotectants on functional state of the vestibular analyzer
p0263 N73-23033
Effect of permanent magnetic fields up to 4500 oe on the mitotic activity of corneal epithelial cells in mice
p0263 N73-23034
Effect of protein quality in the ration of rats on their tolerance of acute hypoxia
p0263 N73-23035
Change in cardiac activity and its phase structure during lower body decompression
p0263 N73-23037
Reactions of eye retinal vessels and intraocular pressure during man's 120 day restriction to a horizontal position
p0263 N73-23038
Ways to increase effectiveness of physical training
p0263 N73-23039
Effect of vestibular analyzer irritation under hypoxic conditions on some visual analyzer functions
p0263 N73-23040
Investigation of chromosomal aberrations in lymphocytes of human peripheral blood with in vitro exposure to 645-MeV protons and X-rays
p0263 N73-23041
Computation of the Coriolis acceleration acting on receptors of human semicircular canals in rotating systems
p0263 N73-23042
Effect of restriction of motor activity of animals on their tolerance to an acute

exposure to carbon monoxide
p0264 N73-23043
New book on the gravitational receptor
p0264 N73-23044
Fourth All-Union Conference on Space Biology and Aerospace Medicine
p0264 N73-23045
Use of oxygen for reducing the fatigue of man in flight
[JPRS-59041] p0264 N73-23051
Cryobiological studies and space biology problems
[JPRS-59129] p0265 N73-23055
Cryobiological studies and space biology problems
[JPRS-59129] p0293 N73-24120
The state and prospects of biogeocenological research
[JPRS-59395] p0338 N73-27053
Man and his environment
[JPRS-59369] p0339 N73-27064
Interaction between man and biosphere
[JPRS-59366] p0339 N73-27065
Development of man-computer interaction
[JPRS-59149] p0340 N73-27070
Soviet Biology and Medicine, Volume 7, No. 3, 1973
[JPRS-59702] p0371 N73-29021
Ideas of K. E. Tsiolkovskiy and modern points of view on the mechanisms of the influence of weightlessness
p0371 N73-29022
Morphological changes in the kidneys during multihour exposure to 4-g accelerations imparted in different directions
p0372 N73-29023
Central nervous system reaction to mechanical factors
p0372 N73-29024
Influence of hypoxia on elimination of some gaseous products of vital functions in white rats
p0372 N73-29025
Temperature regimes and cerebral blood supply of animals
p0372 N73-29026
Morphological and electron microscope changes in the cardiac muscle of dogs exposed to chronic gamma irradiation
p0372 N73-29027
Influence of the discontinuity between two media on the distribution of absorbed energy in a charged particle track
p0372 N73-29028
Search for effective regimes for desaturation of the human body for preventing high-altitude decompression disorders
p0372 N73-29029
Influence of stepped adaptation to high-mountain conditions on the respiratory function and acid-alkali equilibrium in the blood during different motor activity regimes of subjects
p0372 N73-29030
Effect of hypodynamia and other spaceflight factors on the excretion of 17-hydroxycorticosteroids and aldosterone
p0373 N73-29031
Effect of decompression of the lower half of the body on the condition of the human cardiovascular system (based on X-ray kymography data)
p0373 N73-29032
Analysis of vestibular effects in experiments in swigs
p0373 N73-29033
Some characteristics of hemodynamics in an orthostatic test for persons with different vestibular-autonomic tolerance
p0373 N73-29034
Informative parameters of the psychophysiological state of flight personnel when working with an indicator
p0373 N73-29035
Study of the possibility of human adaptation to days of 16-hour duration
p0373 N73-29036
Study of the species composition of enteric bacilli during prolonged confinement of man in a closed space
p0373 N73-29037
Investigation of decontaminating properties of sorbents used in the life support system of spaceships
p0374 N73-29038
Selection of optimum light characteristics of marks in optical sighting devices
p0374 N73-29039
Space medicine incorporated into practice on earth
[JPRS-59803] p0374 N73-29040
A bibliography of Soviet literature on aviation, alpine and space biology and medicine
[JPRS-53329] p0375 N73-29047
Robot-manipulator control algorithms
[JPRS-59717] p0375 N73-29051
Current research results and future efforts in the problem of the biological effect of microwave radiation in the Department of Physical Injury at the Institute of Industrial Medicine
p0415 N73-30904
Proposals for specification of allowable levels of microwave radiation
p0415 N73-30905
Space medicine and extraterrestrial life
[JPRS-59952] p0415 N73-30983
Work and rest schedule for cosmonauts
p0416 N73-30984
Investigating for life on other planets
p0416 N73-30985
Using onboard records for medical purposes
p0416 N73-30986
Ideation and automation
[JPRS-60103] p0440 N73-32019
Space Biology and Medicine, volume 7, no. 4, 1973
[JPRS-60248] p0441 N73-33014
Principal characteristics of a method for regenerating the oxygen in pressurized chambers based on electrolysis with use of solid electrolytes
p0441 N73-33015
Course of the infectious process and functional activity of pulmonary macrophages in mice confined to an atmosphere with a high oxygen content
p0442 N73-33016
Change in the impulse activity of neurons in the respiratory center during electric stimulation of the vestibular nerve and dorsal roots in the spinal cord
p0442 N73-33017
Blood supply to the skeletal muscles of rats during hypokinesia
p0442 N73-33018
Influence exerted on the animal body by continuous and discontinuous exposure to carbon monoxide
p0442 N73-33019
Food consumption and morphological indices of blood in white mice with the replacement of air nitrogen by inert gases in a pressurized chamber
p0442 N73-33020
Effect of accelerations on the active transport of glucose in the small intestine of rats
p0442 N73-33021
Dynamics of weight change and variations in weight indices of internal organs in white mice as a function of atmospheric composition and diet
p0443 N73-33022
Role of extracardial innervation in compensation of an orthostatic load
p0443 N73-33023
Biological evaluation of the influence of a helium-oxygen atmosphere on a culture of mammalian cells
p0443 N73-33024
Investigation of the possibility of recording the human electroencephalogram under the influence of muscle noise
p0443 N73-33025
Analysis of some indices of electronystagmograms for healthy persons in labyrinthal calorization tests
p0443 N73-33026
State of blood filling and bioelectric activity of the brain in circulatory hypoxia in healthy persons and individuals with early forms of autonomic-vascular dysfunction
p0443 N73-33027

Peculiarities of water-mineral metabolism during 120-day hypokinesia
p0443 N73-33028
Elimination of creatinine in the urine during prolonged hypokinesia
p0444 N73-33029
Influence of transverse accelerations on electrolyte composition of plasma and erythrocytes
p0444 N73-33030
Psychoneurological problems in man's adaptation to modified diurnal regimes
p0444 N73-33031
Problems of social psychology in space
p0444 N73-33032
Change in calcium content in human bone tissue accompanying thermal stress
p0444 N73-33033
Peculiarities of human skin reactions to lotions of different composition during hypokinesia
p0444 N73-33034
Method for automatic processing of the indices of an operator's gas exchange during work in a trainer using a ""DNEPR'' electronic computer
p0444 N73-33035
Negative pressure on the lower half of the human body and the volume of circulating plasma
p0444 N73-33036
Work of the Aerospace Section of the Leningrad Society of Physiologists, Biochemists and Pharmacologists Imeni I. M. Sechnov
p0445 N73-33037
The mechanisms and principles of goal-directed behavior
[JPRS-60091] p0447 N73-33053
A dynamic theory of behavior
p0447 N73-33054
An approach to the construction of a formal model of behavior
p0447 N73-33055
One class of adaptive systems and results of computer modeling of their self-instruction
p0447 N73-33056
The expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057
Simple inductive interaction between man and objects and events
p0447 N73-33058
Modeling complex behavior with the aid of M-automata
p0448 N73-33059
Experimental study of a model of motor behavior
p0448 N73-33060
Model of the organization of goal-directed behavior
p0448 N73-33061
Theoretical aspects of motivational stimulation
p0448 N73-33062
Structural, behavioral, and EEG correlates of alimentary motivation
p0448 N73-33063
Use of motivational relations to find the acceptor of action
p0448 N73-33064
Relation of conditioned reactions to evaluation of results of forthcoming reinforcement
p0449 N73-33065
Features of the behavior of dogs when given a choice of various reinforcements
p0449 N73-33066
Structure and functions of central mechanisms of reinforcement
p0449 N73-33067
On various types of corticopetal influences from deep-seated emotiogenic formations of the brain
p0449 N73-33068
Correlation between primary response and late slow oscillation of evoked potential in response to light in awake and anaesthetized rabbits
p0449 N73-33069
The orientative-investigative reaction as a factor changing the configuration of evoked potentials on repeated flashes
p0449 N73-33070
Cross-Correlation analysis of stress rhythm during action of stimuli of different biological significance
p0450 N73-33071
JOINT PUBLICATIONS RESEARCH SERVICE, WASHINGTON, D.C.
Radiobiology, Volume 11, no. 5, 1971
[AEC-TR-7306] p0066 N73-12103

K

KANNER (LEO) ASSOCIATES, REDWOOD CITY, CALIF.
Analysis of electrocardiograms of Rhesus monkeys (Macaca mulatta)
[NASA-TT-F-14675] p0136 N73-16062
Physiological problems of prolonged weightlessness
[NASA-TT-F-14672] p0149 N73-17110
Metabolism of drugs. 77: In vitro metabolism of antipyrine
[NASA-TT-F-14868] p0218 N73-20116
Resistance of animals immersed in water to high acceleration
[NASA-TT-F-14828] p0219 N73-20119
Some construction principles for remote control imitative manipulators
[NASA-TT-F-14889] p0232 N73-21152
Renin-angiotensin system in simulated hypervolemia induced by immersion
[NASA-TT-F-14885] p0258 N73-22036
Stimulation of panting by isolated heating of the spinal column in the wake dog
[NASA-TT-F-14998] p0338 N73-27054
General regularities of the reaction of the human organism to the combined influence of environmental factors characteristic for a spacecraft cabin
[NASA-TT-F-15020] p0374 N73-29041
Role of living matter in carbonate formation
[NASA-TT-F-15028] p0375 N73-29046
Fluorometric 11-hydroxy-corticosteroid assay in human blood plasma
[NASA-TT-F-15092] p0416 N73-30990
Methods of determination of hydroxyproline in biological fluids and their use in clinical practice
[NASA-TT-F-15093] p0417 N73-30997
Functional test with a water load
[NASA-TT-F-15091] p0417 N73-30998
Study of immunological reactivity
[NASA-TT-F-15089] p0418 N73-30999
Some properties of a mathematical analog of the central portion of a vestibular analyzer
[NASA-TT-F-15130] p0420 N73-31015
Evaluation of gas exchange and reaction of the cardiovascular and respiratory systems to physical work
[NASA-TT-F-15090] p0437 N73-31997
The measurement of arterial pressure under the influence of ODNT
[NASA-TT-F-15087] p0437 N73-31998
Thermoregulation during physical exercises of men with diverse physical performance capacities
[NASA-TT-F-15142] p0437 N73-32003
Measurement of the arterial pressure by the tachooscilloscope method after N. N. Savitskiy
[NASA-TT-F-15088] p0439 N73-32016
Contribution to the study of factors controlling the rate of summation of luminous impressions from unequal surfaces (retinal heterogeneity)
[NASA-TT-F-15124] p0440 N73-32017
KANSAS STATE UNIV., MANHATTAN.
Performance and life support in altered environments
[AD-754216] p0224 N73-20157
Systems analysis optimization and control of life support systems in confined spaces
p0294 N73-24131
KENTUCKY UNIV., LEXINGTON.
Circadian phase relationships in monkeys
p0224 N73-21088
KETTERING MEMORIAL HOSPITAL, DAYTON, OHIO.
The coronary patient in industry
p0146 N73-17084
KIROV MEDICAL INST., GORKY (USSR).
Simplified method of multiple implantation of electrodes in the subcortical structures of the brain
[NASA-TT-F-15001] p0366 N73-27947

L

LEAR SIEGLER, INC., LOS ANGELES, CALIF.
Study of capabilities, necessary characteristics and effectiveness of pilot ground trainers. Volume 1: Main text
[AD-755681] p0341 N73-27081
LEHIGH UNIV., BETHLEHEM, PA.
Operating room environment control. Part A: A valve cannister system for anesthetic gas adsorption. Part B: A state-of-the-art survey of laminar flow operating rooms. Part C: Three laminar flow experiments
p0231 N73-21141
LEICESTER UNIV. (ENGLAND).
Simulator sickness in passive observers
[FPRC-1310] p0175 N73-18119
Factors contributing to motion sickness susceptibility: Adaptability and receptivity
p0225 N73-21095
LENINGRAD (A. A. ZHDANOV) STATE UNIV. (USSR).
One class of adaptive systems and results of computer modeling of their self-instruction
p0447 N73-33056
LIBRARY OF CONGRESS, WASHINGTON, D.C.
Cosmonaut's emotional stress in space flight
[NASA-TT-F-14654] p0067 N73-12113
LINGUISTIC SYSTEMS, INC., CAMBRIDGE, MASS.
On table salt fever
[NASA-TT-F-14677] p0136 N73-16063
The carotenoids of some Basidiomycetes: A chemiotaxionomic survey
[NASA-TT-F-14858] p0219 N73-20117
Adenin-nucleotides NAD (plus) and NADN in skeletal muscles during intensive work and at rest
[NASA-TT-F-14856] p0219 N73-20118
Radiation sterilization with a Van de Graaff accelerator
[NASA-TT-F-14821] p0219 N73-20120
Human adaptation to hypoxia and tolerance of high environmental temperatures
[NASA-TT-F-14860] p0219 N73-20122
Changes in the resistance of the organism to extreme effects during prolonged acclimatization to hypoxia
[NASA-TT-F-14861] p0219 N73-20123
The use of ultra-fine fiber filter cloth for removing bacterial contaminants from the air
[NASA-TT-F-14940] p0293 N73-24123
Effect of monochromatic light on blood constants
[NASA-TT-F-14941] p0297 N73-25111
Simplified method of multiple implantation of electrodes in the subcortical structures of the brain
[NASA-TT-F-15001] p0366 N73-27947
The role of water temperature in bradycardia during facial immersion
[NASA-TT-F-15025] p0450 N73-33072
Retinal adaptation
[NASA-TT-F-15036] p0450 N73-33074
LITTON SYSTEMS, INC., BEVERLY HILLS, CALIF.
Vibration
p0105 N73-15098
LOCKHEED MISSILES AND SPACE CO., PALO ALTO, CALIF.
On the influence of individual elastic properties of the human body on the results of arterial pressure measurement
p0099 N73-14072
Fluid flow in a tube with deformable wall in the presence of valves
p0298 N73-25117
LOCKHEED MISSILES AND SPACE CO., SUNNYVALE, CALIF.
The development of a non-cryogenic nitrogen/oxygen supply system
[NASA-CR-128688] p0112 N73-15159
Water electrolysis system refurbishment and testing
[NASA-CR-128687] p0112 N73-15160
LOEWY (RAYMOND)/SNAITH (WILLIAM), INC., NEW YORK.
Habitability study shuttle orbiter
[NASA-CR-128863] p0190 N73-19162
Habitability study shuttle orbiter
[NASA-CR-128864] p0190 N73-19163
Habitability study, earth orbital space stations
[NASA-CR-124276] p0300 N73-25132
LOGICON, INC., SAN DIEGO, CALIF.
Automated flight training (AFT). Instrument flight maneuvers
[AD-759366] p0341 N73-27080
LOS ALAMOS SCIENTIFIC LAB., N.MEX.
Characterization and properties of medical grade Pu-238 fuels
[LA-DC-72-473] p0067 N73-12115
LOUISIANA STATE UNIV., BATON ROUGE.
A deterministic model of a human performing compensatory tracking
[AD-746725] p0072 N73-13101
Single-cell protein from waste cellulose
[NASA-CR-130300] p0106 N73-15115
LOUISIANA STATE UNIV., NEW ORLEANS.
Analysis of chemical components from plant tissue samples
[NASA-CR-128740] p0186 N73-19131
LOUISVILLE UNIV., KY.
Applicability of research on sustained performance, endurance, and work-rest scheduling to the development of concepts and doctrine of continuous operations
p0271 N73-23988
LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH, ALBUQUERQUE, N.MEX.
Specialized physiological studies in support of manned space flight
[NASA-CR-128741] p0186 N73-19129
LTV AEROSPACE CORP., DALLAS, TEX.
Study of space shuttle EVA/IVA support requirements. Volume 1: Technical summary report
[NASA-CR-133991] p0414 N73-30089
Study of space shuttle EVA/IVA support requirements. Volume 2: EVA/IVA tasks, guidelines, and constraints definition
[NASA-CR-133992] p0419 N73-31007
Study of space shuttle EVA/IVA support requirements. Volume 3: Requirements study for space shuttle pressure suits
[NASA-CR-133993] p0419 N73-31008
Study of space shuttle EVA/IVA support requirements. Volume 4: Requirements study for space shuttle mobility aids
[NASA-CR-133994] p0419 N73-31009
Study of space shuttle EVA/IVA support requirements. Volume 5: Requirements study for space shuttle emergency 4 support
[NASA-CR-133995] p0419 N73-31010
LUNAR SCIENCE INST., HOUSTON, TEX.
Effects of Apollo 12 lunar material on lipid levels of tobacco tissue and slash pine cultures
[NASA-CR-128606] p0591 N73-10063

M

MAINZ UNIV. (WEST GERMANY).
Drug use and performance
p0228 N73-21115
MAN-ACOUSTICS AND NOISE, INC., SEATTLE, WASH.
The effect of simulated sonic boom rise time and overpressure on electroencephalographic waveforms and disturbance judgments
[FAA-RD-73-115] p0411 N73-30066
MARTIN MARIETTA CORP., DENVER, COLO.
Conceptual design study for a teleoperator visual system, phase 1
[NASA-CR-124059] p0150 N73-17117
Water recovery and solid waste processing for aerospace and domestic applications
[NASA-CR-128839] p0190 N73-19161
Regenerative particulate filter development
[NASA-CR-115505] p0268 N73-23084
Conceptual design study for a teleoperator visual system, phase 2
[NASA-CR-124273] p0300 N73-25133
Design, fabrication and acceptance testing of a zero gravity whole body shower, volume 1
[NASA-CR-134066] p0420 N73-31019
MARYLAND UNIV., COLLEGE PARK.
A study of phycophysiology in controlled environments
[NASA-CR-135796] p0445 N73-33039
MASSACHUSETTS INST. OF TECH., CAMBRIDGE.
Considerations for the design of an onboard air traffic situation display
p0598 N73-10112
Supervisory sampling and control: Sources of suboptimality in a prediction task
p0598 N73-10114

MONTANA UNIV., MISSOULA.
Telemetry experiments with a hibernating black bear
[NASA-CR-133926] p0418 N73-31000
MSA RESEARCH CORP., EVANS CITY, PA.
Development of system design information for carbon dioxide using an amine type sorber
[NASA-CR-111849] p0420 N73-31018

N

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C.
The relationship of NASA occupational medicine and environmental health with the Advisory Center on Toxicology
p0144 N73-17058
Visual search: A symposium conducted at the spring meeting, 1970
[AD-754327] p0221 N73-20133
Color Vision: A symposium conducted at the spring meeting, 1971
[AD-754328] p0221 N73-20136
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. AMES RESEARCH CENTER, MOFFETT FIELD, CALIF.
Pilot performance with a simulated ILS independence pictorial display
p0599 N73-10122
Human transinformation rates during one-to-four axis tracking with a concurrent audio task
p0602 N73-10139
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] p0101 N73-14092
Miniature ingestible telemeter devices to measure deep body temperature
[NASA-CASE-ARC-10583-1] p0101 N73-14093
Effect of prolonged bedrest and plus Gz acceleration on peripheral visual response time
[NASA-TN-D-7161] p0107 N73-15117
Biological effects of fuel and exhaust components from spacecraft descent engines employing hydrazine
[NASA-TM-X-2714] p0107 N73-15118
Machining of low percentage beryllium copper alloys
p0144 N73-17059
Pilot performance during a simulated standard instrument procedure turn with and without a predictor display
[NASA-TM-X-62201] p0150 N73-17118
Responses of blind fish to gravitational changes as achieved in parabolic flight
p0226 N73-21101
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] p0259 N73-22048
Body water compartments during bed rest: Evaluation of analytical methods
[NASA-TR-R-406] p0295 N73-24133
A study of the thermoregulatory characteristics of a liquid-cooled garment with automatic temperature control based on sweat rate: Experimental investigation and biothermal man-model development
[NASA-TN-D-7311] p0299 N73-25126
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] p0334 N73-26071
Visual examination apparatus
[NASA-CASE-ARC-10329-1] p0335 N73-26072
An evaluation of some special techniques for nuclear waste disposal in space
[NASA-TM-X-62272] p0366 N73-27943
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. ELECTRONICS RESEARCH CENTER, CAMBRIDGE, MASS.
Preliminary report on use of Lahey clinic automated history in an idustrial complex
p0144 N73-17060
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. FLIGHT RESEARCH CENTER, EDWARDS, CALIF.
An operating environmental health program
p0147 N73-17093
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.
Medical Information Management System (MIMS): A generalized interactive information system
[NASA-TM-X-66076] p0604 N73-10156
The value of continued followup in a preventive medicine program
p0145 N73-17072
Lead pencils
p0148 N73-17097
The 1972 Summer Institute for Biomedical Engineering
[NASA-TM-X-66214] p0231 N73-21139
Method of detecting and counting bacteria in body fluids
[NASA-CASE-GSC-11092-2] p0337 N73-27052
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] p0438 N73-32011
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. JOHN F. KENNEDY SPACE CENTER, COCOA BEACH, FLA.
Infrasound
p0147 N73-17085
Radiation protection handbook
[NASA-TM-X-69410] p0186 N73-19133
Environment sanitation handbook
[NASA-TM-X-69522] p0440 N73-32020
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. LANGLEY RESEARCH CENTER, LANGLEY STATION, VA.
Ride quality research activities at NASA Langley Research Center
p0591 N73-10024
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] p0136 N73-16061
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] p0141 N73-16096
Bacterial identification using light scattering measurements: A preliminary report
p0147 N73-17090
An investigation of a sterile access technique for the repair and adjustment of sterile spacecraft
[NASA-TN-D-7147] p0151 N73-17122
Factors influencing public acceptance of STOL noise
p0441 N73-32960
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. LEWIS RESEARCH CENTER, CLEVELAND, OHIO.
Wind tunnel investigation of the effect of high relative velocities on the structural integrity of birds
[NASA-TM-X-68163] p0106 N73-15114
ASRDI oxygen technology survey. Volume 2: Cleaning requirements, procedures, and verification techniques
[NASA-SP-3072] p0111 N73-15155
Cardiac R-wave detector with automatic sensitivity control
[NASA-TN-D-7152] p0112 N73-15158
A high yield neutron target for cancer therapy
[NASA-TM-X-68179] p0136 N73-16067
A method for defining down-wind evacuation areas for transportation accidents involving toxic propellant spills
[NASA-TM-X-68188] p0141 N73-16097
Circuit for detecting initial systole and dicrotic notch
[NASA-CASE-LEW-11581-1] p0178 N73-18139
Loudness function derives from data on electrical discharge rates in auditory nerve fibers
[NASA-TN-D-7297] p0293 N73-24121
Ophthalmic method and apparatus
[NASA-CASE-LEW-11669-1] p0339 N73-27062
Ophthalmic liquefaction pump
[NASA-CASE-LEW-12051-1] p0437 N73-32000
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEX.
Food and nutrition studies for Apollo 16
[NASA-TM-X-58096] p0067 N73-12110
Medical technology advances from space research
p0075 N73-13851
Apollo 14 microbial analyses
[NASA-TM-X-58094] p0099 N73-14073
Environmental health program activities
p0143 N73-17057
An exercise prescription intervention program with periodic ergometric grading
p0145 N73-17067
Proceedings of the 1971 Manned Spacecraft Center Endocrine Program Conference
[NASA-TM-X-58093] p0173 N73-18104
Endocrine laboratory results Apollo missions 14 and 15
p0173 N73-18105

Human disorientation in a rotating spacecraft
p0599 N73-10119
A Bayesian model for visual space perception
p0600 N73-10127
Human control capabilities
p0106 N73-15107
Laboratory hood design
p0144 N73-17063
Study of design and control of remote manipulators. Part 2: Vibration considerations in manipulator design
[NASA-CR-124189] p0221 N73-20138
Study of design and control of remote manipulators. Part 4: Experiments in video camera positioning with regard to remote manipulation
[NASA-CR-124190] p0221 N73-20139
Study of design and control of remote manipulators. Part 1: Summary and conclusions
[NASA-CR-124191] p0259 N73-22046
Mechanisms of deterioration of nutrients phase 1
[NASA-CR-128915] p0269 N73-23085
Robot vision
[NASA-CR-133458] p0365 N73-27936
Factors affecting depth perception
[AD-759261] p0375 N73-29050

MASSACHUSETTS UNIV., AMHERST.
Modeling food preferences over time
[AD-749079] p0102 N73-14100

MATRIX RESEARCH CO., SAN MATEO, CALIF.
UH-1H job performance tests (VNAF) series TS-1
[AD-745163] p0605 N73-10166

MAYO CLINIC, ROCHESTER, MINN.
Studies of the effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-129603] p0063 N73-12074
Studies of the effects of gravitational and inertial forces on cardiovascular and respiratory dynamics
[NASA-CR-133212] p0298 N73-25119

MCDONNELL AIRCRAFT CO., ST. LOUIS, MO.
The high q approach
[AD-757216] p0295 N73-24138

MCDONNELL-DOUGLAS ASTRONAUTICS CO., HUNTINGTON BEACH, CALIF.
Test results of six-month test of two water electrolysis systems
[NASA-CR-128629] p0612 N73-11095
Cost analysis of water recovery systems
[NASA-CR-124098] p0177 N73-18134
Study to validate the Non-Interference Performance Assessment (NIPA) technique
[NASA-CR-128865] p0190 N73-19164
Cost analysis of oxygen recovery systems
[NASA-CR-124175] p0230 N73-21137
Cost analysis of life support systems
[NASA-CR-124305] p0340 N73-27072
Cost analysis of carbon dioxide concentrators
[NASA-CR-124302] p0340 N73-27073
Cost analysis of water recovery systems
[NASA-CR-124303] p0340 N73-27074
Cost analysis of oxygen recovery systems
[NASA-CR-124304] p0340 N73-27075
Cost analysis of atmosphere monitoring systems
[NASA-CR-124306] p0341 N73-27076
Study of CO2 sorbents for extravehicular activity
[NASA-CR-114632] p0376 N73-29054
Life support system cost study: Addendum to cost analysis of carbon dioxide concentrators
[NASA-CR-124462] p0447 N73-33052

MCDONNELL-DOUGLAS ASTRONAUTICS CO., ST. LOUIS, MO.
Inflight Blood Collection System (IBCS) verification plan
[NASA-CR-128645] p0067 N73-12112
Relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance
[AD-759583] p0337 N73-26096

MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.
The Computerized Anatomical Man (CAM) model
[NASA-CR-134043] p0440 N73-32022

MCGILL UNIV., MONTREAL (QUEBEC).
DRB Aviation Medical Research Unit reports. Volume 2: 1968-1971
[DR-215] p0606 N73-11057
DRB Aviation Medical Research Unit reports, volume 1, 1964-1968
[DR-208-VOL-1] p0109 N73-15136

MEDICAL BIOLOGICAL LAB. RVO-TNO, RIJSWIJK (NETHERLANDS).
Summaries, biological effects of microwave radiation, part 5
[MBL-1972-5] p0591 N73-10060
Summaries, biological effects of microwave radiation, part 6
[MBL-1972-6] p0591 N73-10061

MEDICAL BIOLOGICAL LAB. RVO-TNO, THE HAGUE (NETHERLANDS).
Biological effects of microwave radiation, part 1
[MBL-1971-7-PT-1] p0264 N73-23048

MEDICAL COLL. OF WISCONSIN, MILWAUKEE.
The effect of carbon monoxide on time perception
[PB-214651/2] p0299 N73-25123

MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., OTTOBRUNN (WEST GERMANY).
Target acquisition for picture transmission using a TV system
[MBB-UFE-892-72-O] p0113 N73-15165

MIAMI UNIV., FLA.
Studies of the Renin-aldosterone system and sodium homeostasis during simulated weightlessness: Application of the water immersion model to man
p0174 N73-18110

MIAMI UNIV., OXFORD, OHIO.
Factors affecting the detection and recognition of colored targets
[AD-746297] p0610 N73-11083

MICHIGAN COLL. OF OSTEOPATHIC MEDICINE, PONTIAC.
The effects of oxygen at high pressure on catecholamine metabolism
[AD-759405] p0339 N73-27061

MICHIGAN UNIV., ANN ARBOR.
The use of a battery of tracking tests in the quantitative evaluation of neurological function
p0599 N73-10118
Mapping an operator's perception of a parameter space
p0600 N73-10129
Impact
p0105 N73-15097
Psychosocial factors in coronary heart disease
p0143 N73-17054
Link system of the human torso
[AD-754924] p0223 N73-20151
A characterization of the visibility process and its effect on search policies
p0294 N73-24130
Evaluation of holographic elements in a heads-up display
[AD-758057] p0295 N73-24139
The use of a tracking test battery in the quantitative evaluation of neurological function
[NASA-CR-132275] p0340 N73-27069

MINISTRY OF EDUCATION AND SCIENCES-DOCUMENTATION DEPARTMENT, THE HAGUE (NETHERLANDS).
Training of personnel to man the various parts of an information centre and to operate various kinds of service
p0297 N73-24205

MINNESOTA UNIV., MINNEAPOLIS.
Circadian rhythms of the circulatory system. Literature review: Computerized case study of transmeridian flight and medication effects on a mildly hypertensive subject
[AD-743300] p0595 N73-10090

MINNESOTA UNIV., ST. PAUL.
Storage stability and improvement of intermediate moisture foods
[NASA-CR-133978] p0366 N73-27944

MISSOURI UNIV., COLUMBIA.
Effects of hyperoxia on sulfhydryl concentration of Escherichia coli
[AD-746193] p0610 N73-11087
Chronic oxygen electrodes: A feasibility study
[AD-748422] p0074 N73-13120
The role of depressed metabolism in increased radio resistance
[NASA-CR-130381] p0133 N73-16038
Mechanisms of oxygen toxicity at the cellular level
[AD-758725] p0299 N73-25124

MONSANTO RESEARCH CORP., DAYTON, OHIO.
Research program on beryllium oxide analysis and toxicity
[AD-754936] p0220 N73-20131

Dissociation of effects of prolonged confinement and bedrest in normal human subjects: Heart rate and body temperature
p0175 N73-18113
Dissociation of effects of prolonged confinement and bed rest in normal human subjects: Cortisol, insulin, thyroxine, and triiodothyronine
p0175 N73-18114
Nutrition and musculoskeletal function: Skylab experiment series number M070
p0175 N73-18115
A study of liver microsomal cytochromes following chronic exposure to dichloromethane
[NASA-TM-X-69101] p0176 N73-18128
Continuous animal exposure to methylene-chloride
[NASA-TM-X-69099] p0177 N73-18129
Continuous exposure of animals to methylisobutylketone
[NASA-TM-X-69100] p0177 N73-18130
Microbial response to space environment, part B
p0232 N73-21762
Visual light flash phenomenon, part C
p0233 N73-21763
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] p0259 N73-22045
Proceedings of the microbial Response to Space Environment Symposium
[NASA-TM-X-58103] p0291 N73-24102
Background and general design of the microbial response to space environment experiment (M191) system
p0291 N73-24103
Infectivity and egg production of Nematospiroides dubius as affected by space flight and ultraviolet irradiation
p0291 N73-24106
Postflight analyses of Bacillus thuringiensis organisms exposed to space flight conditions
p0291 N73-24109
Thermoluminescent dosimetry for the Apollo 16 microbial response to space environment experiment (M191)
p0292 N73-24115
Habitability data handbook. Volume 2: Architecture and environment. Supplement 2
[NASA-TM-X-69322] p0295 N73-24135
Foot pedal operated fluid type exercising device
[NASA-CASE-MSC-11561-1] p0439 N73-32014

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. MARSHALL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

Metabolic analyzer
[NASA-CASE-MFS-21415-1] p0112 N73-15156
Medical automation system at the Marshall Space Flight Center
p0145 N73-17068
Microbiological surveillance of food handling at NASA-MSFC
[NASA-TM-X-64734] p0220 N73-26127
Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] p0222 N73-20141
Microbiological assay of the Marshall Space Flight Center neutral buoyancy simulator
[NASA-TM-X-64736] p0229 N73-21127
The EKG isolator and cardiotachometer system
p0261 N73-22924
Free flying teleoperator
p0261 N73-22925
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] p0299 N73-25125
Ergometer
[NASA-CASE-MFS-21109-1] p0366 N73-27941
Biodetection grinder
[NASA-TM-X-64765] p0376 N73-29059
Tilting table for ergometer and for other biomedical devices
[NASA-CASE-MFS-21010-1] p0413 N73-30078
Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] p0415 N73-30090

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. WALLOPS STATION, WALLOPS ISLAND, VA.

Review of a series of proctosigmoidoscopies done at Wallops Station, Virginia
p0144 N73-17061
A case of near fatal ammonia gas poisoning
p0147 N73-17088

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D.C.

Seventh Annual Conference on Manual Control
[NASA-SP-281] p0597 N73-10104
Some results of the development and investigation of instruments for monitoring the cardiovascular system
[NASA-TT-F-14492] p0604 N73-10154
Life support systems of spacecraft
[NASA-TT-F-14436] p0604 N73-10155
Micrococcus pierantonii. New species of photogenic bacteria of the luminous organ of Rondeletia Minor NAEF
[NASA-TT-F-14439] p0608 N73-11072
In regard to bacterial reduction of organically bound phosphoric acid
[NASA-TT-F-14723] p0069 N73-13080
Do microbes reduce phosphate?
[NASA-TT-F-14724] p0069 N73-13081
Weightlessness
p0105 N73-15099
Atmosphere control
p0106 N73-15108
Aerospace vehicle water-waste management
p0106 N73-15111
Evolution, gravitation, weightlessness
[NASA-TT-F-730] p0107 N73-15116
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064
Proceedings of the Annual Conference of NASA Clinic Directors, Environmental Health Officials and Medical Program Advisors
[NASA-TM-X-69072] p0142 N73-17048
Medical examinations for radiation workers
p0143 N73-17050
Experience factors in performing periodic physical evaluations
p0143 N73-17052
Leave taking and overtime behavior as related to demographic, health, and job variables
p0143 N73-17055
Environmental health program in NASA
p0143 N73-17056
Proceedings of the Annual Conference of NASA Clinic Directors, Environmental Health Officials and Medical Program Advisors
[NASA-TM-X-69073] p0144 N73-17064
Dynamic EKG study
p0144 N73-17065
Normally expected aberrations in the 8-hour dynamic EKG
p0145 N73-17066
Proceedings of the Annual Conference of NASA Clinic Directors, Environmental Health Officials and Medical Program Advisors
[NASA-TM-X-69074] p0146 N73-17078
The management of NASA employee health problem; status 1971
p0146 N73-17079
Coronary risk factor scoring as a guide for counseling
p0146 N73-17080
Problem of acceleration in aviation medicine. Part 3: Functional changes in the nervous system during G-loads and weightlessness
[NASA-TT-F-733] p0148 N73-17105
Recent NASA aerospace medicine technology developments
p0265 N73-23058
Potential teleoperator applications in manned aerospace systems
p0270 N73-23904
Fourth All-Union Conference on Space Biology and Medicine
[NASA-TT-F-14964] p0298 N73-25116
Investigative methods in space biology and medicine: Transmission of medical data
[NASA-TT-F-14996] p0338 N73-27057
Safety of life and health of crews of spacecraft and space stations in emergency situations
[NASA-TT-F-14997] p0339 N73-27068
Investigation of the rhythm of sleep and wakefulness in crews of the spaceships Soyuz 3-9 before, during and after exposure to spaceflight
[NASA-TT-F-15103] p0375 N73-29048
Biomedicine: A compilation
[NASA-SP-5958(01)] p0438 N73-32007
Exchange of hand heat. The role of circulatory reactions and variations of the local temperature of arterial bloods
[NASA-TT-F-15143] p0445 N73-33043

NATIONAL AVIATION FACILITIES EXPERIMENTAL CENTER, ATLANTIC CITY, N.J.
Human engineering analysis of airport lighting control panels and a proposal for a new design
[FAA-RD-72-93] p0066 N73-12108
A comparison of general aviation occupant restraint systems
[FAA-NA-73-30] p0375 N73-29052
NATIONAL BUREAU OF STANDARDS, BOULDER, COLO.
Insulation of liquid oxygen dewars
[AD-763325] p0421 N73-31026
NATIONAL BUREAU OF STANDARDS, WASHINGTON, D.C.
Project SOAP: A systems approach to biomedical research program management, a case study
[NBS-TN-761] p0252 N73-21977
NATIONAL CENTER FOR ATMOSPHERIC RESEARCH, BOULDER, COLO.
Climate change and the influence of man's activities on the global environment
[PB-213676/2] p0267 N73-23074
NATIONAL DEFENCE MEDICAL CENTRE, OTTAWA (ONTARIO).
Colour vision in the Canadian Armed Forces
p0179 N73-19070
NATIONAL HEALTH SERVICES, INC., NEW YORK.
Impact of NASA stress laboratory program on US colleges
p0147 N73-17092
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, WASHINGTON, D.C.
Analysis of decelerator, accelerator and shock cord propelled rebound sleds for evaluating air bag restraints
[PB-212706] p0224 N73-20155
NATIONAL LENDING LIBRARY FOR SCIENCE AND TECHNOLOGY, BOSTON SPA (ENGLAND).
Calculation of the thermal resistance of the air layers in air-permeable clothing
[NLL-DRIC-TRANS-2717-(3623.66)] p0101 N73-14089
Voice and hearing in the system of acoustic orientation of animals
[NLL-DRIC-TRANS-3056-(3623.66)] p0291 N73-24101
Meteorological conditions and infection of the upper respiratory tract in children
[NLL-M-22866-(5828.4F)] p0297 N73-25109
NATIONAL RESEARCH COUNCIL OF CANADA, OTTAWA (ONTARIO).
Materials of the Second All-Union Conference on the study of the effects of magnetic fields on biological organisms, 24-26 September 1969
[NRC-TT-1545] p0099 N73-14070
Research and development of radiation-protective agents (now becoming available as oral drugs
[NRC-TT-1609] p0106 N73-15112
The direct endangering of the living space (a proposed set of quantitative concepts)
[NRC-TT-1636] p0376 N73-29057
Sleep deprivation effects on accuracy and speed of response selection and execution
p0422 N73-31854
NAVAL AEROSPACE MEDICAL INST., PENSACOLA, FLA.
A limited review of the effect of cigarette smoking on performance with emphasis on aviation
[AD-754421] p0267 N73-23071
NAVAL AEROSPACE MEDICAL RESEARCH LAB., NEW ORLEANS, LA.
Non-fatal ejection vertebral fracture and its prevention
p0265 N73-23059
Specialized anthropometry requirements for protective-equipment evaluation
p0266 N73-23066
NAVAL AEROSPACE MEDICAL RESEARCH LAB., PENSACOLA, FLA.
Some of the mechanisms underlying motion sickness
p0591 N73-10020
Direction-specific adaptation effects acquired in a slow rotation room
[NASA-CR-129063] p0591 N73-10062
Comparative evaluation of exposure distributions for air travelers and radiation workers
[AD-743482] p0594 N73-10083
Rhesus monkey heart rate during exercise
[AD-744930] p0595 N73-10089
Comparative motion sickness symptomatology and performance decrements occassioned by hurricane penetrations in C-121, C-130, and F-3 Navy aircraft
[AD-743928] p0596 N73-10100
Specific acute losses of vestibular function in man following unilateral section of one or all components of the eighth cranal nerve
[NASA-CR-129672] p0070 N73-13084
Human head and neck response to impact acceleration
[AD-747988] p0072 N73-13106
A new technique for measuring scotopic critical flicker frequency to indicate psychophysiological stress
[AD-748193] p0101 N73-14088
Effects of some antimotion sickness drugs and secobarbital on postural equilibrium functions at sea level and at 12,000 feet simulated
[AD-748192] p0103 N73-14105
The relationship between habituation to vestibular stimulation and vigilance: Individual differences and subsidiary problems
[AD-749352] p0103 N73-14108
A new approach to criterion development in the replacement air group
[AD-748195] p0104 N73-14111
The vestibular system
p0105 N73-15103
Empirical reduction in potential user population as the result of imposed multivariate anthropometric limits
[AD-752032] p0151 N73-17124
Effects of part-whole training procedures upon the acquisition of complex skills to be performed under stress
p0189 N73-19153
Assessment of reactions to vestibular disorientation stress for purposes of aircrew selection
p0225 N73-21096
Motion sickness questionnaire and field independence scores as predictors of success in Naval aviation training
p0225 N73-21097
Dosimetric characteristics of H2E particles in space
[NASA-CR-131467] p0230 N73-21132
Operant behavior of rhesus monkeys in the presence of extremely low frequency low intensity magnetic and electric fields, experiment 1
[AD-754058] p0230 N73-21134
Toward the development of a criterion for fleet effectiveness in the F-4 fighter community
[AD-755184] p0269 N73-23087
The use of confidential instructor ratings for the prediction of success in naval undergraduate pilot training
[AD-757693] p0296 N73-24146
The measurement of pulmonary extravascular water volume during exposure to simulated high altitude
[AD-763355] p0418 N73-31004
NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.
Human and rat exposures to Halon 1301 under hypobaric conditions
[AD-747958] p0066 N73-12106
Flashblindness recovery following exposure to constant energy adaptive flashes
[AD-747631] p0071 N73-13095
Evidence for activated interfacial charge transport in low-G acceleration stress
[AD-749338] p0100 N73-14079
Accuracy of the mean threshold in the psychophysical method of limits
[AD-749334] p0100 N73-14083
Accuracy of the mean threshold and of the variability in the psychophysical method of constant stimuli
[AD-753009] p0187 N73-19141
Effects of facial hair in oxygen masks
[AD-754075] p0232 N73-21154
The landing signal officer: A preliminary dynamic model for analyses of system dynamics
[AD-762728] p0377 N73-29064
NAVAL BIOMEDICAL RESEARCH LAB., OAKLAND, CALIF.
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-131091] p0186 N73-19127
Studies on possible propagation of microbial contamination in planetary clouds
[NASA-CR-133638] p0375 N73-29049

Release of bacterial spores from the inner walls of a stainless steel cup subjected to thermal stresses and mechanical shock
[NASA-CR-133868] p0416 N73-30987
NAVAL MEDICAL FIELD RESEARCH LAB., CAMP LEJEUNE, N.C.
Maximal oxygen intake as a predictor of performance in running events
[AD-746867] p0071 N73-13093
NAVAL MEDICAL RESEARCH INST., BETHESDA, MD.
Acoustic-optical detection of decompression sickness in hamsters
[AD-743475] p0595 N73-10091
Evaluation of Marine Corps battery powered electrically heated diving dress
[AD-749847] p0102 N73-14101
Bibliography of reported biological phenomena 'effects' and clinical manifestations attributed to microwave and radio-frequency radiation
[AD-750271] p0108 N73-15131
A bibliography of the role of the vestibular apparatus under water and pressure: Content-oriented and annotated
[AD-750686] p0109 N73-15133
A study of a cutaneous code applied to the communication needs of the working diver
[AD-750268] p0113 N73-15169
A diver monitoring system for physiologic studies in all hyperbaric environments
[AD-754399] p0224 N73-20154
The NMRI Mark 3 Mod 1 tremor device
[AD-763343] p0438 N73-32010
NAVAL PERSONNEL AND TRAINING RESEARCH LAB., SAN DIEGO, CALIF.
Technician requirements for maintenance of microelectronics equipment in the fleet
[AD-748040] p0074 N73-13123
NAVAL POSTGRADUATE SCHOOL, MONTEREY, CALIF.
A study of underwater diver tactile sensitivity
[AD-743709] p0594 N73-10082
The effect of temporal uncertainty on human energy expenditure during moderate exercise
[AD-743726] p0594 N73-10084
Parameters affecting underwater vision
[AD-743756] p0595 N73-10092
Vibration effects on pilot tracking performance using a rigid control stick
[AD-745193] p0605 N73-10164
The evaluation of air-to-air combat situations by Navy fighter pilots with artificial intelligence applications
[AD-747519] p0068 N73-12119
A hybrid computer technique for measuring human describing functions and remnant in closed loop tracking tasks
[AD-748659] p0100 N73-14078
Pupil diameter and the cross-adaptive critical tracking task: A method of workload measurement
[AD-749075] p0100 N73-14081
The use of a linear rating scale in selecting a subcritical tracking task parameter
[AD-752036] p0151 N73-17125
Effects of neuromuscular tension in the use of an isometric hand controller
[AD-757252] p0269 N73-23089
An interactive hybrid computer system for time domain audio synthesis
[AD-761730] p0369 N73-27968
Analysis of a description model for hand motion distance in a manual decision task
[AD-761518] p0370 N73-27973
Subjective and physiological indicators of fatique in a vigilance task
[AD-761503] p0413 N73-30077
Current versus stagnant jet pilots' response times: A comparison
[AD-761463] p0421 N73-31025
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER, WASHINGTON, D.C.
An input adaptive, pursuit tracking model of the human opertor
p0597 N73-10108
NAVAL SUBMARINE MEDICAL CENTER, GROTON, CONN.
Psychological effects of prolonged exposure to sonar signals at an elevated intensity. 1: Five days' exposure to signals at 85 dB
[AD-744938] p0594 N73-10087
The visual evoked cortical response as a measure of stress in naval environments: Methodology and analysis. 2: Rapid flash rates
[AD-744934] p0595 N73-10088
Binaural improvement in normal and defective ears in a background of other voices
[AD-746101] p0597 N73-10103
Further tests of training techniques to improve visual-motor coordination of Navy divers underwater
[AD-744936] p0605 N73-10163
Psychological effects of prolonged exposure to sonar signals at an elevated intensity. 2: Twenty-four days exposure to signals at 85 dB
[AD-746103] p0611 N73-11089
Studies of calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia
[AD-749323] p0258 N73-22035
Studies in enlisted submariner motivation. 1: Some etiological factors related to devolunteering of submarine school candidates
[AD-749324] p0260 N73-22054
Improving distance estimation under water: Long-term effectiveness of training
[AD-752979] p0299 N73-25128
NAVAL SUBMARINE MEDICAL RESEARCH LAB., GROTON, CONN.
Apparent object movement produced by head movement under water
[AD-749319] p0101 N73-14086
Visual evoked responses for divers breathing various gases at depths to 1200 feet
[AD-749325] p0108 N73-15127
Improving absolute distance estimation in clear and in turbid water
[AD-752976] p0187 N73-19140
Speech discrimination in noise and hearing loss at 3000 Hertz
[AD-752974] p0298 N73-25118
Masking as an indicator of neural fatigue: A preliminary study
[AD-752975] p0300 N73-25129
Differences in the speed of mentally processing displays containing information about right and left
[AD-759723] p0334 N73-26070
Handedness and adaptation to distortions of size and distance under water
[AD-759722] p0337 N73-26098
The Bohr effect in chronic hypercapnia
[AD-763394] p0418 N73-31005
NAVAL TRAINING EQUIPMENT CENTER, ORLANDO, FLA.
An evaluation of the training effectiveness of device 2F90, TA-4J operational flight trainer. Part 1: The B stage
[AD-750248] p0113 N73-15170
NAVAL WEAPONS LAB., DAHLGREN, VA.
Biological hazards from exposure to ELF electrical fields and potentials
[AD-743480] p0595 N73-10093
NAVY CLOTHING AND TEXTILE RESEARCH UNIT, NATICK, MASS.
Evaluation of heat loss from Navy divers' wet suit
[AD-747276] p0613 N73-11103
Environmental control unit for damage control suit system
[AD-749025] p0075 N73-13125
Damage control suit system
[AD-762428] p0370 N73-27976
NAVY EXPERIMENTAL DIVING UNIT, WASHINGTON, D.C.
Pulmonary mechanical functions in man breathing dense gas mixtures at great depths
[AD-749028] p0100 N73-14082
The calculation of minimum safe inspired gas temperature limits for deep diving
[AD-748197] p0103 N73-14104
Diver anthropometrics
[AD-748627] p0114 N73-15175
Influence of increased ambient pressure and gas density on cardiac rate in man
[AD-755129] p0261 N73-22058
NEW ENGLAND DEACONESS HOSPITAL, BOSTON, MASS.
Ionizing radiation
p0105 N73-15100
NEW MEXICO STATE UNIV., UNIVERSITY PARK.
Predicting human performance 3: Detection of a simple visual signal as a function of time of watch
[AD-745317] p0596 N73-10097
NEW MEXICO UNIV., ALBUQUERQUE.
Study of methods for the improvement of

bacterial transport media
[NASA-CR-128958] p0297 N73-25113
Heart rates and predicted maximal oxygen uptake following training at low to moderate duration and intensity
p0371 N73-29020

NEW YORK UNIV., N.Y.
The effects of physical fatigue on sequencing in eye-hand coordination performance
p0446 N73-33051

NORTH AMERICAN AVIATION, INC., COLUMBUS, OHIO.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143
Naval pilot training system study. Volume 2: Appendices A, B, C, and D.
[AD-756639] p0296 N73-24144
Naval pilot training system study. Volume 3: Executive summary
[AD-756640] p0296 N73-24145

NORTH AMERICAN ROCKWELL CORP., DOWNEY, CALIF.
Effects of simulated artificial gravity on human performance
[NASA-CR-2129] p0067 N73-12111

NORTH AMERICAN ROCKWELL CORP., LOS ANGELES, CALIF.
Tactile sensing means for prosthetic limbs
[NASA-CASE-MFS-16570-1] p0439 N73-32013

NORTH CAROLINA UNIV., CHAPEL HILL.
Interrelation of systemic and cellular responses to acute and chronic hypoxia
[AD-743536] p0594 N73-10081

NORTH DAKOTA STATE UNIV., FARGO.
Quantitation of buried contamination by use of solvents
[NASA-CR-130720] p0149 N73-17111

NORTH DAKOTA UNIV., GRAND FORKS.
Physiology of the rat in hyperbaric environments of helium, nitrogen and nitrous oxide
p0371 N73-29019

NORTHEASTERN UNIV., BOSTON, MASS.
Oxygen metabolism: Metabolic implications in hyperbaric systems
[AD-749381] p0103 N73-14106

NORTHROP SERVICES, INC., HOUSTON, TEX.
The ferrioxalate actinometry system of the microbial response to space environment experiment (M191)
p0292 N73-24113

NOTTINGHAM UNIV. (ENGLAND).
Peripheral acuity with complex stimuli at two viewing distances
p0191 N73-19965

O

OAK RIDGE NATIONAL LAB., TENN.
Animal radiation data and their relevance to man
[CONF-720108-2] p0066 N73-12102
Biology division habrobracon experiment P-1079
[NASA-CR-127142] p0069 N73-13082
Effects of weightlessness on simple life forms in biosatellite 2
[CONF-720441-1] p0107 N73-15119
Radiation transport codes for potential applications related to radiobiology and radiotherapy using protons, neutrons, and negatively charged pions
[NASA-CR-130965] p0176 N73-18127
Biological effects of titanium
[ORNL-TIP/TIRC-72-65] p0186 N73-19135
Toxicity and biological effects of aluminum in animals
[ORNL-TIP/TIRC-72-76] p0187 N73-19136

OAKLAND UNIV., ROCHESTER, MICH.
A hybrid computer program for the visual display of compensatory system model parameters
p0598 N73-10109
A dynamic model of the human postural control system
p0599 N73-10116

OFFICE OF NAVAL RESEARCH, LONDON (ENGLAND).
European scientific notes, volume 26, no. 6
[AD-746143] p0609 N73-11080

OFFICE OF THE AIR FORCE SURGEON GENERAL, WASHINGTON, D.C.
Human exposure criteria to laser energy
p0266 N73-23067

OHIO STATE UNIV. RESEARCH FOUNDATION, COLUMBUS.
The interaction of infrared radiation with the eye: A review of the literature
[NASA-CR-128407] p0591 N73-10064
Human responses to electricity: A literature review
[NASA-CR-128422] p0592 N73-10065
Effects of weightlessness on the development of the vestibular apparatus and ocular nystagmus in the rat
[NASA-CR-114569] p0149 N73-17112
Fluid dynamic aspects of cardiovascular behavior during low-frequency whole-body vibration
[NASA-CR-133843] p0412 N73-30069

OHIO STATE UNIV., COLUMBUS.
Pattern recognition by retina-like devices
[PB-211238] p0102 N73-14096
Barometric pressure
p0104 N73-15092
Atmosphere
p0104 N73-15093
Ethyl alcohol and pilot performance: Military implications of in-flight studies
p0227 N73-21113
Multi-task time-sharing requirements
[AD-755363] p0269 N73-23088

OREGON STATE UNIV., CORVALLIS.
Microbial activities in hyperbaric environments
[AD-745334] p0596 N73-10096

P

PAN AMERICAN WORLD AIRWAYS, INC., COCOA BEACH, FLA.
Stress studies at Kennedy Space Center: A backward and forward look
p0146 N73-17082

PERCEPTRONICS, INC., ENCINO, CALIF.
Man/machine interaction in adaptive computer aided control initial study
[AD-754835] p0222 N73-20147

PHISIOMETRICS, INC., MALIBU, CALIF.
Postponement of incipient collapse due to work-induced heat stress by limited cooling
[NASA-CR-134059] p0438 N73-32005

PITTSBURGH UNIV., PA.
On the fundamental importance of the social psychology of research as a basic paradigm for the philosophy of science: A philosophical case study of the psychology of the Apollo moon scientists
[NASA-CR-130832] p0176 N73-18122

PRINCETON UNIV., N.J.
A performance measure for manual control systems
p0601 N73-10135

PUBLIC HEALTH SERVICE HOSPITAL, SAN FRANCISCO, CALIF.
A study of ventricular contractility and other parameters possibly related to vasodepressor syncope
[NASA-CR-128968] p0333 N73-26056

PUBLIC HEALTH SERVICE, PHOENIX, ARIZ.
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration
[NASA-CR-129513] p0065 N73-12100
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration
[NASA-CR-131086] p0185 N73-19123
Services provided in support of the planetary quarantine requirements of the National Aeronautics and Space Administration
[NASA-CR-133742] p0411 N73-30064

PUBLIC HEALTH SERVICE, ROCKVILLE, MD.
The NASA-USPHS health evaluation and enhancement program
p0147 N73-17091

PUBLIC HEALTH SERVICE, WASHINGTON, D.C.
Personal benefits of a health evaluation and enhancement program
p0145 N73-17069

PURDUE UNIV., LAFAYETTE, IND.
Results of the 1971 Corn Blight Watch experiment
[NASA-TM-X-69055] p0136 N73-16064
Spectral characteristics of normal and nutrient-deficient maize leaves
[NASA-CR-130032] p0136 N73-16065
Hematological viscometry
p0231 N73-21142
Spectra of normal and nutrient-deficient maize leaves

[NASA-CR-132145] p0293 N73-24119
Engineering Foundation Conference on Pattern Information Processing
[PB-214617/3] p0294 N73-24129
The effect of high intensity noise of varying frequencies on neuroendocrine response in the rat
p0371 N73-29018
Heating of food in modified atmospheres
[NASA-CR-134040] p0419 N73-31012

Q

QUANTUM DYNAMICS, TARZANA, CALIF.
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] p0439 N73-32015

R

RADIATION RESEARCH ASSOCIATES, INC., FORT WORTH, TEX.
Initial radiation exposure from nuclear weapons
[AD-745906] p0610 N73-11084
RADIO CORP. OF AMERICA, CAMDEN, N.J.
Apollo 11 impact on the occupational medicine program, NASA Manned Spacecraft Center
p0143 N73-17049
RAND CORP., SANTA MONICA, CALIF.
Intrinsic oscillations in neural networks: A linear model for parallel, single-unit pathways
[R-984-RC] p0070 N73-13083
RANDOMLINE INC., WILLOW GROVE, PA.
A psychophysical study of the RF sound phenomenon
[AD-747684] p0099 N73-14076
RENSSELAER POLYTECHNIC INST., TROY, N.Y.
Indirect blood pressure measuring device
p0231 N73-21144
High altitude pulmonary edema
[AD-756940] p0294 N73-24127
RESEARCH INST. OF NATIONAL DEFENCE, STOCKHOLM (SWEDEN).
Can attention be diverted?
[FOA-2-C-2482-H5] p0611 N73-11092
Correlation between man and mouse in respect of physical activity and oxygen consumption
[FOA-1-B-1233-A5] p0149 N73-17108
RESEARCH TRIANGLE INST., DURHAM, N.C.
Advancements in medicine from aerospace research
p0075 N73-13848
RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, N.C.
Applications of aerospace technology in biology and medicine
[NASA-CR-130544] p0142 N73-17047
Applications of aerospace technology in biology and medicine
[NASA-CR-133226] p0334 N73-26067
NASA Application Team Program: Application of aerospace technology in biology and medicine
[NASA-CR-135527] p0418 N73-31001
ROCHESTER UNIV., N.Y.
Human responses to microwave irradiation: A review and evaluation of published reports
[UR-3490-29] p0107 N73-15120
Theoretical and experimental models for dust deposition and retention in man
[UR-3490-169] p0107 N73-15121
Thyroid pathophysiology of microwave radiation
[UR-3490-149] p0107 N73-15122
Relevancy of experimental studies of microwave induced cataracts to man
[UR-3490-103] p0107 N73-15123
ROSE-HULMAN INST., TERRA HAUTE, IND.
Handling system for Iridium-192 seeds
p0231 N73-21143
ROWLAND AND CO., HADDONFIELD, N.J.
Support of advanced development objective 43-13, human factors technology
[AD-744984] p0613 N73-11104
ROYAL AIR FORCE CENTRAL MEDICAL ESTABLISHMENT, LONDON (ENGLAND).
Hearing conservation in aircrew and ground support personnel
p0148 N73-17101
AVMED policy on sleep in aircrew
p0227 N73-21108
ROYAL AIR FORCE HOSPITAL, ELY (ENGLAND).
Medication and drugs in aircrew
p0226 N73-21105
Ocular side effects of drugs in aviation medicine
p0228 N73-21121

ROYAL AIR FORCE INST. OF AVIATION MEDICINE, FARNBOROUGH (ENGLAND).
Colour vision requirements in different operational roles
p0179 N73-19072
Emotional and cardiovascular stresses of centrifugation: Effect of beta receptor blockade on heart rate response
p0188 N73-19149
Use of hypnotics by aircrew. 1: Operational considerations and experimental studies
p0226 N73-21106
Use of hypnotics by aircrew: Adaptive tracking as a technique for the evaluation of performance decrements related to the flying task
p0227 N73-21109
Use of hypnotics by aircrew: Considerations of metabolism and excretion
p0228 N73-21118
Human factors problems in conflict detection and resolution
p0269 N73-23714
ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).
Some experiments on the friction of fabrics on human skin
[RAE-TR-72037] p0604 N73-10157
The effect of handedness on a tracking task
[RAE-TR-72117] p0141 N73-16098
A projected grid method for recording the shape of the human face
[RAE-TR-71184] p0141 N73-16099
Pilot workload: A conceptual model
p0142 N73-17010
Early thoughts on compound strains
p0188 N73-19144
A flight test programme to study the effects of environmental stresses on aircrew operating military strike aircraft
p0188 N73-19145
Oxygen diffusion in the brain. Part 1: Spatial conception and calculation of oxygen diffusion
[RAE-LIB-TRANS-1663] p0333 N73-26060
The rapid determination of aldosterone in urine by paper chromatography
[RAE-LIB-TRANS-1682] p0333 N73-26061
Fractioning and determination of corticosteroids in urine by thin layer chromatography
[RAE-LIB-TRANS-1694] p0333 N73-26062
ROYAL NAVAL PERSONNEL RESEARCH COMMITTEE, LONDON (ENGLAND).
Perceptual confusions between four-dimensional sounds
[OES-6/72] p0421 N73-31023
Efficiency in heat after a night without sleep
[OES-8/72] p0421 N73-31024

S

SAN ANTONIO STATE TUBERCULOSIS HOSPITAL, TEX.
Laboratory aspects of blood lipids
p0145 N73-17073
Some pitfalls of urine analysis
p0147 N73-17089
SAN FRANCISCO UNIV., CALIF.
High Z particle cosmic-ray exposure of Apollo 8-14 astronauts
[AD-745188] p0596 N73-10101
The high energy multicharged particle exposure of the microbial ecology evaluation device on board the Apollo 16 spacecraft
p0292 N73-24114
SCHOOL OF AEROSPACE MEDICINE, BROOKS AFB, TEX.
Computer program for activity determinations in the USAFSAM whole-body counter
[AD-745578] p0593 N73-10078
Biomedical acceptability of 45- to 60-day space flight
[NASA-CR-129131] p0609 N73-11074
Evaluation of laser eye protectors commercially available
[AD-746293] p0612 N73-11100
The recording of cardiac rhythms on a magnetic tape for later computer input analysis
[AD-748105] p0075 N73-13124
Cytologic aspect of RF radiation in the monkey, part 1
[AD-749583] p0108 N73-15128

Human factors evaluation of laser protective visors
[AD-751470] p0142 N73-16102
History, rationale, and verification of color vision standards and testing in the United States Air Force
p0179 N73-19069
Effects of sodium pentobarbital on rats in normocapnic and chronically hypercapnic conditions
[AD-751234] p0187 N73-19142
Estimates of physiologic reserve after acceleration exposure in man
p0188 N73-19150
Findings on the cost of flying transport missions
p0189 N73-19151
The use of physiological protective maneuvers in high acceleration environments
p0189 N73-19156
Retinal effects of multiple pulse gallium arsenide laser
[AD-753419] p0221 N73-20135
The USAFSAM selection, test, and rehabilitation program of motion sick pilots
p0225 N73-21098
Drug abuse detection efforts
p0228 N73-21117
Aeromedical evaluation of the phased-dilution concept for oxygen breathing systems
p0266 N73-23065
Red blood cell density and volume changes in man exposed to hypobaric hyperoxia
[AD-755783] p0267 N73-23072
Effects of hyperoxia on heme biosynthesis
[AD-756836] p0294 N73-24125
Effect of low humidity on human performance
[AD-756835] p0296 N73-24142
Hazard evaluation of a gallium arsenide diode array laser
[AD-762277] p0370 N73-27975
A universal calibrator for steadiness of stance measuring platforms
[AD-763093] p0377 N73-29066
New instrumentation for measurement of man's stability of stance
[AD-763096] p0377 N73-29067
Middle-ear muscle reflex to aircraft noise
[AD-764739] p0446 N73-33048

SCIENTIFIC RESEARCH INST. OF INSTRUMENT AUTOMATION, MOSCOW (USSR).

The expedient functioning of automata with normal and disturbed behavior in experiments on reinforcement selection
p0447 N73-33057

SCIENTIFIC TRANSLATION SERVICE, SANTA BARBARA, CALIF.

The scientific basis of mineral water therapy, especially that of the Karlsbad Muehlbrunn
[NASA-TT-F-14620] p0069 N73-13079
Time zones and sport
[NASA-TT-F-14632] p0073 N73-13116
Physical and radiobiological investigations on artificial earth satellites: Estimating the radiation hazard of space flights
[NASA-TT-F-724] p0173 N73-18098
Dosimetry of space radiations
p0173 N73-18100
The biological effect of cosmic radiation and the standardization of a permissible dose level (on conducting radiobiological experiments in outer space)
p0173 N73-18102
The combined effect of ionizing radiation and other space flight factors (results of flight experiments)
p0173 N73-18103
Problems of space biology. Volume 14: Radiobiological aspects of the reactivity of the organism during space flights
[NASA-TT-F-721] p0211 N73-20054
Influence of radioprotective preparations from the mercaptoalkylamine group (cystamine, S,beta-aminoethylisothiuronium) on the resistance of animals to transversely directed overloads
p0211 N73-20055
Influence of monosodium salt of beta-aminoethylthiophosphoric acid on the resistance of animals to transversely directed overloads
p0211 N73-20056
Influence of radioprotectors from the aminothiol group on the cardiac function of guinea pigs under the influence of overloads
p0211 N73-20057
The mechanism of reduced ability to withstand overloads under the influence of radio-protective pharmacological substances
p0211 N73-20058
Influence of certain radioprotectors on the ability of white rats to withstand acute hypoxia
p0211 N73-20059
Certain aspects of the practical utilization of medicinal substances under flight conditions
p0212 N73-20060
Sensitivity of mice to radioprotectors from the aminothiol and indolylalkylamine series during the period of aftereffects from transversely directed overloads
p0212 N73-20061
Influence of certain radioprotective preparations on the motor-evacuatory function of the gastrointestinal tract of healthy and irradiated rats
p0212 N73-20062
Certain characteristics of the action of sympathomimetic amines on the reflex functions of the central nervous system of irradiated and sympathectomized animals
p0212 N73-20063
Characteristics of the action of medicinal preparations under hypothermic conditions
p0212 N73-20064
Chemical means of prophylaxis of radiation sickness
p0212 N73-20065
Pharmacological properties of substances for medicinal prophylaxis of radiation damage
p0212 N73-20066
Antiradiation effectiveness of cystamine under various conditions of gamma irradiation
p0212 N73-20067
Chemical protection against mixed gamma-neutron radiation with various contributions of neutrons to the absorbed dose
p0212 N73-20068
Elimination of cystamine in the organism and the prolongation of its radioprotective effect
p0213 N73-20069
Influence of gamma radiation on the elimination of the toxic effect of cystamine
p0213 N73-20070
Influence of shielding certain parts of the body on radiation sickness and survival of animals with total gamma-neutron irradiation
p0213 N73-20071
Change in reactivity of animals to certain pharmacological preparations with parts of the body shielded during total irradiation
p0213 N73-20072
Influence of shielding certain parts of the body on the course of radiation sickness in dogs with total gamma irradiation
p0213 N73-20073
Effect of shielding the stomach on the frequency of chromosomal aberrations in the cells of the marrow of guinea pigs and rats with gamma-irradiation at doses of 50-200 r
p0213 N73-20074
Aminotransferases of the blood serum of dogs following total exposure to gamma rays with the stomach or head shielded
p0213 N73-20075
Pathomorphological changes in the organs of white rats following irradiation by protons with an energy of 120 MeV and the role or partial shielding in the attenuation of radiation damage
p0214 N73-20076
Significance of radiosensitivity of individual parts of the body in the development of radiation pathology
p0214 N73-20077
Certain methods of prophylaxis of radiation sickness
p0214 N73-20078
Reactivity of irradiated animals shielded by mercapto- (cystamine and tsistafos) and

indolylalkylamines (5-HOT and serotonin) to transversely directed overloads
p0214 N73-20079
Rate of recovery of radioresistance with the combined application of ionizing radiation and dynamic flight factors on the organism
p0214 N73-20080
Influence of cystamine combined with sympathomimetic amines on reparative processes following the action of radiation and overloads
p0214 N73-20081
Magnitude of the irreversible portion of radiation damage with the combined action of radiation and acceleration
p0214 N73-20082
Reaction of the peripheral blood in dogs under the complex action of transverse overloads and gamma irradiation
p0214 N73-20083
Evaluating the influence of vibration on the radiation reaction in dogs with the aid of certain clinical-hematological indices
p0215 N73-20084
Influence of preliminary administration of the radioprotector finam on the reactivity of the tissues of irradiated animals under various experimental conditions
p0215 N73-20085
Influence of pharmacochemical substances on the reactivity of the organism to the combined action of gamma radiation and transverse overloads
p0215 N73-20086
The problem of the resistance of experimental animals to acute hypoxia at various stages of radiation sickness
p0215 N73-20087
State of the peripheral blood of irradiated animals under prolonged conditions of reduced barometric pressure
p0215 N73-20088
Method of combined tissue blocks for comparative pathomorphological study of radiation pathology
p0215 N73-20090
Problem of relative biological effectiveness of fast neutrons
p0215 N73-20091
Excretion of free amino acids with the urine as a test for early diagnosis of radiation damage
p0215 N73-20092
Contribution to the chemical taxonomy of the Agaricales pigments of Boletus and Cortinaria
[NASA-TT-F-14865] p0219 N73-20124
Solvent effect of ESR spectra of nitroxide free radicals
[NASA-TT-F-14866] p0220 N73-20125
Experience with the method of Grabecki and coworkers for the determination of urine delta-aminolevulinic acid in the prevention of lead poisoning
[NASA-TT-F-14864] p0229 N73-21128
Psychological characteristics of the activity of cosmonauts
[NASA-TT-F-727] p0229 N73-21129
Problems of space biology. Volume 17: Pathophysiological bases of aviation and space pharmacology
[NASA-TT-F-736] p0257 N73-22033
The effects of the hydrostatic pressure of the water bath on the capillary blood pressure and on the dehydration of the connective tissue
[NASA-TT-F-14894] p0265 N73-23052
Synthesis rate of phospholipids and cytochromes b5 and P-450 in thiamine-deficient rats after treatment with thiamine
[NASA-TT-F-14989] p0334 N73-26064
Biological life support systems
[NASA-TT-F-15005] p0339 N73-27067
Noise and noise sickness
[NASA-TT-F-748] p0365 N73-27935
Space ergonomics
[NASA-TT-F-750] p0366 N73-27946
The relationship between the intermediate medium and the transformation and contrast phenomena
[NASA-TT-F-15035] p0376 N73-29055
The oxides of manganese: Their comparative toxicity and hygienic importance and the clinical medicine of chronic manganese exposure
[NASA-TT-F-15000] p0412 N73-30067
Effect of Coriolis acceleration on the vestibular apparatus of a cosmonaut and its experimental study in the laboratory
[NASA-TT-F-15129] p0417 N73-30993
Sleep and cerebral temperature in the rat during the chronic exposure to a hot environment
[NASA-TT-F-15082] p0417 N73-30994
Effects of certain extreme stresses on the structure of the vascular system
[NASA-TT-F-15081] p0437 N73-32001
Virucidal action of hydrogen peroxide aerosols in decontamination of air in an influenza nidus
[NASA-TT-F-15127] p0438 N73-32006

SCRIPPS CLINIC AND RESEARCH FOUNDATION, LA JOLLA, CALIF.
Effects of space environment on T-7 bacteriophage and spores of Bacillus subtilis 168
p0291 N73-24107

SCRIPPS INSTITUTION OF OCEANOGRAPHY, SAN DIEGO, CALIF.
Air-to-ground visibility of lights at low background levels
p0191 N73-19967

SCRIPTA TECHNICA, INC., WASHINGTON, D.C.
Hypertonia and atherosclerosis under high mountain conditions
[NASA-TT-F-745] p0176 N73-18121
Changes of cell enzymes, glucose, cholesterol and 17-hydroxycorticosteroids in blood during physical exercise as a function of the physical training status
[NASA-TT-F-14826] p0216 N73-20093
The effects of muscular exercise on urinary excretions of adrenal harmones in the normal man
[NASA-TT-F-15046] p0374 N73-29043
New data in the use of therapeutic exercise in diseases of the peripheral vessels
[NASA-TT-F-15043] p0374 N73-29045
Molecular mechanisms of adaptation to hypoxia
[NASA-TT-F-15058] p0411 N73-30060

SINGER CO., BINGHAMTON, N.Y.
Naval Pilot training system study. Volume 1: Basic report
[AD-756638] p0296 N73-24143
Naval pilot training system study. Volume 2: Appendices A, B, C, and D.
[AD-756639] p0296 N73-24144
Naval pilot training system study. Volume 3: Executive summary
[AD-756640] p0296 N73-24145

SMITHSONIAN INSTITUTION, WASHINGTON, D.C.
Satellite (IRLS) tracking of elk
[NASA-CR-130301] p0104 N73-15090

SOCIETY OF AUTOMOTIVE ENGINEERS, INC., NEW YORK.
A study of alternative designs for a system to concentrate carbon dioxide in a hydrogen-depolarized cell
[NASA-CR-131868] p0259 N73-22047

SOUTHAMPTON UNIV. (ENGLAND).
The transmission of triaxial vibration to pilots in the Scout AH MkI helicopter
[ISVR-TR-58] p0141 N73-16100
A survey of human response to vibration research in Great Britain
[ISVR-TR-60] p0415 N73-30093

SOUTHWEST RESEARCH INST., SAN ANTONIO, TEX.
Assistance to NASA in biomedical areas of the technology utilization program
[NASA-CR-129588] p0068 N73-13071
Assistance to NASA in biomedical areas of the technology utilization program
[NASA-CR-129998] p0109 N73-15135
Southwest Research Institute assistance to NASA in biomedical areas of the technology utilization program
[NASA-CR-130022] p0140 N73-16093
Southwest Research Institute assistance to NASA in biomedical areas of the technology utilization program
[NASA-CR-130984] p0173 N73-18097

SPACE AGE CONTROL, INC., PALMDALE, CALIF.
High pressure space suit glove
[NASA-CR-114532] p0112 N73-15162

ST. LOUIS UNIV., MO.
Objective evaluation of cutaneous thermal sensivity
[NASA-CR-114564] p0150 N73-17113

STANFORD RESEARCH INST., CALIF.
A computer assisted teleoperator control station with tactile feedback
p0602 N73-10143
STANFORD RESEARCH INST., MENLO PARK, CALIF.
Manual underwater acoustics
[AD-746520] p0073 N73-13113
The probabilistic structure of planetary contamination models
[NASA-CR-130558] p0148 N73-17103
An investigation of atmospheric effects on laser propagation and the impact on eye safety
[AD-755405] p0259 N73-22044
Studies to design and develop improved remote manipulator systems
[NASA-CR-2238] p0260 N73-22055
Arousal from sleep by noises from aircraft with and without acoustically treated nacelles
[NASA-CR-2279] p0338 N73-27058
Macromolecular fractionation and determination
[NASA-CR-114673] p0438 N73-32009
STANFORD UNIV., CALIF.
Application of frequency discrimination technique to the analysis of electroencephalographic signals
[NASA-CR-129173] p0611 N73-11091
Representation and description of curved objects
[AD-755139] p0223 N73-20152
Cytochemical studies of planetary microorganisms - Explorations in exobiology
[NASA-CR-133272] p0338 N73-27059
Investigation of an astronaut maneuvering scheme
p0339 N73-27063
STANFORD UNIV., PALO ALTO, CALIF.
Biomedical technology transfer applications of NASA science and technology
[NASA-CR-131246] p0211 N73-20053
STATE UNIV. OF NEW YORK, SYRACUSE.
Urinary excretion of antidiuretic hormone in man
p0174 N73-18107
SYSTEMED CORP., DAYTON, OHIO.
Continuous animal exposure to dichloromethane
[AD-746295] p0611 N73-11088
Toxicology
p0105 N73-15101
The management of chronic disease: A study of employee morbidity and mortality at the NASA, Goddard Space Flight Center, 1966 - 1971
p0147 N73-17086
Toxic Hazards Research Unit annual technical report, 1972
[NASA-CR-131675] p0259 N73-22043
SYSTEMS CONTROL, INC., PALO ALTO, CALIF.
Current status of models for the human operator as a controller and decision maker in manned aerospace systems
p0270 N73-23897
SYSTEMS TECHNOLOGY, INC., HAWTHORNE, CALIF.
Visual-motor response of crewmen during a simulated 90-day space mission as measured by the critical task battery
[NASA-CR-2240] p0295 N73-24134
SYSTEMS TECHNOLOGY, INC., INGLEWOOD, CALIF.
Problems in modeling man machine control behavior in biodynamic environments
p0597 N73-10105
Manual control theory applied to air traffic controller-pilot cooperation
p0598 N73-10113
Effects of display format on pilot describing function and remnant
p0599 N73-10123
A dynamic response and eye scanning data base useful in the development of theories and methods for the description of control/display relationships
p0600 N73-10124
The measurement of driver describing functions in simulated steering control tasks
p0600 N73-10130
Visual motor response of crewmen during a simulated 90 day space mission as measured by the critical task battery
p0601 N73-10133
Serial segment method for measuring remnant
p0601 N73-10136
Motion cue effects on pilot tracking
p0602 N73-10141

T

TECHNISCHE HOGESCHOOL, EINDHOVEN (NETHERLANDS).
The multiple dipole model of the ventricular depolarisation
[TH-71-E-25] p0067 N73-12116
TECHNISCHE UNIV., BERLIN (WEST GERMANY).
The influence of a prediction display on the quasi-linear describing function and remnant measured with an adaptive analog-pilot in a closed loop
p0599 N73-10120
TECHNOLOGY, INC., HOUSTON, TEX.
Skylab food test and integration
[NASA-CR-128910] p0268 N73-23080
TECHNOLOGY, INC., SAN ANTONIO, TEX.
Ocular effects of repetitive laser pulses
[AD-746795] p0071 N73-13096
Ocular effects of near infrared laser radiation for safety criteria
[AD-746793] p0071 N73-13097
TECHTRAN CORP., GLEN BURNIE, MD.
The question of water and electrolyte levels at high temperatures
[NASA-TT-F-13915] p0592 N73-10066
Understanding the effect of calcium-deficient diet on the composition of growing bone
[NASA-TT-F-13917] p0592 N73-10067
Investigation of the biosynthesis of unsaturated fatty acids in yeast
[NASA-TT-F-13918] p0592 N73-10068
Studies of the survival time of bacteria on surfaces and the possibilities of influencing it. 3: Influence of various lighting conditions and previous disinfection in the use of plastics
[NASA-TT-F-13923] p0592 N73-10069
Comparison of the development of the vestibular (labyrinth) of the frog Rana temporaria in conditions of weightlessness
[NASA-TT-F-14624] p0592 N73-10072
Sixty ambulatory patients treated with Salvarsan
[NASA-TT-F-14618] p0609 N73-11076
Apparent plasma hyperosmolality in alcoholic intoxication
[NASA-TT-F-13910] p0609 N73-11079
Studies of conformational transitions of cytochrome c by the spin-label method
[NASA-TT-F-14623] p0065 N73-12099
Study of the resistance of cultured and natural microbes using the ethylene oxide sterilization method
[NASA-TT-F-14612] p0069 N73-13078
Is physical and mental exhaustion caused by a shortage of atmospheric ions?
[NASA-TT-F-14646] p0070 N73-13088
Studies on pre-biological evolution. 3: Black azulmic acids obtained from ammonium cyanide
[NASA-TT-F-14640] p0070 N73-13089
Pneumatic prosthesis control
[NASA-TT-F-14628] p0073 N73-13115
Medicine and space
[NASA-TT-F-735] p0175 N73-18116
Problems of Space Biology, volume 16
[NASA-TT-F-719] p0180 N73-19077
Reactivity of an organism in conditions of prolonged spaceflight
p0180 N73-19078
Certain results of medical investigations aboard the Voskhod-2 spacecraft
p0180 N73-19079
Study of features of high intensity noise effects during spaceflight
p0180 N73-19080
Effect of immersion on certain motor function indices
p0180 N73-19081
Basal metabolism under conditions of simulated weightlessness
p0181 N73-19082
Change in the capacity of man to withstand transverse stresses after hypodynamia of varying duration
p0181 N73-19083
Change in certain indices of the function of external respiration during the action of G-forces
p0181 N73-19084

Effect of accelerations on reactivity of the qastro-intestinal tract to pharmacological aqents
p0181 N73-19085
Changes in the nuclei of liver cells during the action of transverse stresses on animals
p0181 N73-19086
Problem of the interaction of analyzers and degree of vestibular reactions to the action of external stimuli
p0181 N73-19087
Condition of the vestibular analyzer in dogs after prolonged irradiation in small doses
p0181 N73-19088
Condition of metabolism during prolonged stay of man in a small enclosure with cyclically changing atmosphere
p0181 N73-19089
Conditions of ascertaining and conditioning man's capacity to distinguish the composition of a breathing atmosphere
p0182 N73-19090
Effect of hyperoxic medium on cells, tissues and organs of experimental animals
p0182 N73-19091
Action of hyperoxia on connective tissue
p0182 N73-19092
Gas exchange and electrical activity of the skeletal musculature of animals in a helium and oxygen medium
p0182 N73-19093
Study of the physiological effect of replacing atmospheric nitrogen in the air with inert gases under conditions of oxygen insufficiency and increased concentrations of carbon dioxide
p0182 N73-19094
Possibility of using adaptation of hypoxic hypoxia in a system of conditioning
p0182 N73-19095
Effect of certain gaseous toxic substances on the resistance of animals to acute hypoxic hypoxia
p0182 N73-19096
Certain peculiarities of the biological action of gaseous toxic substances which are discharged into the atmosphere from the urine and feces
p0182 N73-19097
Effect of a chemical preservative on the intensity of the discharge of certain gaseous toxic substances from stored urine
p0183 N73-19098
Preservation of urine in a system for regeneration of water from it
p0183 N73-19099
The resistance of animals to toxic action of certain gases after adaptation to hypoxia
p0183 N73-19100
The toxic action of gaseous products of the vital activity of an organism
p0183 N73-19101
Problem of studying the toxicity of indole
p0183 N73-19102
Problem to toxicity of exhaled air
p0183 N73-19103
Peculiarities of determining the oxidizability of water during its regeneration
p0183 N73-19104
Study of the technology of decontamination of water which has been regenerated from the liquid products of human vital functions
p0183 N73-19105
Effect of the frequency of changing the nutrient solution on productivity of plants cultivated on keramzit
p0183 N73-19106
Certain indices of the material balance of man as a component in a closed ecological system
p0184 N73-19107
Studies of the stability of the chemical composition of a chlorella biomass during its prolonged cultivation with recovery of the medium on nitrates
p0184 N73-19108
Use of products of biological mineralization for cultivation of higher and lower autotrophs
p0184 N73-19109
Problem of the possibility of using products of the vital functioning of man which have been mineralized by the wet burning method
p0184 N73-19110
Problem of mineralization of vegetative waste products of a biocomplex by the method of thermal combustion
p0184 N73-19111
Study of a method of conservation of urine relative to spaceflight conditions
p0184 N73-19112
The food component, based on stores of dehydrated products, in life support systems for crews of space vehicles during prolonged flights
p0184 N73-19113
Problem of the survival of microorganisms under conditions simulating those on Mars
p0185 N73-19116
Action of a set of extremal factors on ribonuclease
p0185 N73-19120
Effect of a gas environment on catalase cryolysis
p0185 N73-19121
Problems of Space Biology. Volume 15: Functional morphology during extremal actions [NASA-TT-F-738]
p0185 N73-19126
Problems of space biology. Volume 12: The gravity receptor: Evolution of the structural, cytochemical, and functional organization [NASA-TT-F-720]
p0220 N73-20128
Problems of aviation medicine [NASA-TT-F-687]
p0252 N73-21981
Analysis of the mechanism of interoceptive reflexes in altitude meteorism
p0252 N73-21982
The effect of increased pressure in the cavities of the alimentary tract on evoked reflexes. Report 1: The effect on caloric nystagmus
p0253 N73-21983
The effect of increased pressure in the cavities of the alimentary tract on evoked reflexes. Report 2: The effect on Proprioceptive cervical and lumbar compensatory reflexes
p0253 N73-21984
Changes of the automatism, excitability and conductivity of the myocardium in hypoxic hypoxia
p0253 N73-21985
The kinematics of cardiac contractions in healthy persons and patients during hypoxic hypoxia
p0253 N73-21986
Viscoelastic properties of arteries in conditions of reduced partial oxygen pressure in the inhaled air
p0253 N73-21987
The early recognition of latent coronary insufficiency in flight personnel with the aid of combined functional loading
p0253 N73-21988
Changes in vector cardiograms after glucose tests in civil aviation flight personnel with atherosclerosis
p0253 N73-21989
Method of tone and speech audiometry in the medical examination of flight personnel
p0253 N73-21990
Medical observations of flight personnel suffering from manifestations of arterial hypertension
p0253 N73-21991
Changes of compensatory proprioceptive evoked reflexes during hypoxia
p0253 N73-21992
Problems of blood circulation biophysics during hyperbaric oxygen breathing
p0253 N73-21993
Conditioned-reflex motion sickness as a method of evaluating the statokinetic resistance of the flight personnel
p0254 N73-21994
Acceleration during double rotation in the Barany chair
p0254 N73-21995
Mechanisms of disturbance of the thermoregulating function of the organism under reduced barometric pressure
p0254 N73-21996

A study of the diurnal fluctuations in the cardiac rhythm as one of the early symptoms of functional insufficiency of the cardiovascular system
p0254 N73-21997
The experimental treatment of poisonings with a new organophosphoric insecticide (methylnitrophos) with the use of cholinesterase reactivators
p0254 N73-21998
Age restrictions in civil aviation
p0254 N73-21999
On the problem of barotrauma of the middle ear
p0254 N73-22000
Some physiological reactions in pilots during training and during flight
p0254 N73-22001
Mechanisms of sleep
[NASA-TT-F-740] p0257 N73-22023
Pathology of the brain and the structure of nocturnal sleep
p0257 N73-22024
Several methods for comparative physiological study of the stages of natural sleep and wakefulness
p0257 N73-22025
Electrophysiological indices of sleep in the cerebral cortex
p0257 N73-22026
Several aspects of the functional interdependence of delta sleep and radio sleep
p0257 N73-22027
Subcellular changes in the motor region of the cortex during sleep
p0257 N73-22028
The organization of the process of sleep in man according to the data of electrophysiological investigation of the deep structures of the brain
p0257 N73-22029
The impulse activity of thalamic cells in various phases of sleep and wakefulness
p0257 N73-22030
The effects of electrical activity and excitability of certain limbic and mid-brain structures during various phases of sleep
p0257 N73-22031
Maturational changes in the bioelectrical activity of the brain in sleeping children
p0257 N73-22032
V. V. Streltsov: The founder of the Soviet School of Aviation-Space Medicine
[NASA-TT-F-15101] p0417 N73-30991
Internal cerebral ""set point'' temperature model in warm-blooded animals
[NASA-TT-F-15138] p0437 N73-32002
Determining optimal periods of bed rest by certain physiological indices
[NASA-TT-F-15144] p0438 N73-32004
Functional disturbances during hypokinesia in man
[NASA-TT-F-15148] p0450 N73-33073

TECHTRAN CORP., SILVER SPRING, MD.
Circulation and water balance during immersion in a water bath
[NASA-TT-F-14834] p0185 N73-19124
Medical-biological problems of spaceflight: An index to the Russian and foreign literature
[NASA-TT-F-14662] p0265 N73-23053
Ischemic heart disease and cosmic radiation
[NASA-TT-F-14992] p0334 N73-26065
The work and rest regime of cosmonauts
[NASA-TT-F-14990] p0336 N73-26093
The molecular organization of the active center of microsomal cytochrome P-450
[NASA-TT-F-15042] p0374 N73-29042
The incidence of abnormal liver function tests in drug addicts without a history of jaundice
[NASA-TT-F-15041] p0374 N73-29044
Medical aspects of the safe descent and landing of a spacecraft on the earth and other celestial bodies
[NASA-TT-F-15047] p0376 N73-29053
Problems of space biology. Volume 21: Tissue oxygen under extreme flight factors
[NASA-TT-F-762] p0411 N73-30065
The ammonifying ability of the denitrifying bacteria of the species pseudomonas fluorescens
[NASA-TT-F-15086] p0412 N73-30068
Sanitation norms of permissible noise in living accommodations, public building, and in the territory of habitable buildings
[NASA-TT-F-15065] p0414 N73-30088
The second orbital flight
[NASA-TT-F-15076] p0417 N73-30992

TENNESSEE UNIV., TULLAHOMA.
Cybernetic integration of experiments into the CVT system
[NASA-CR-124150] p0230 N73-21136

TETRA TECH, INC., PASADENA, CALIF.
Factors affecting long range vision
p0450 N73-33630
Criteria for Vision: Resolution, signal-to-noise ratio contrast
p0450 N73-33631

TEXAS A&M UNIV., COLLEGE STATION.
A comparison of visual cuing methods in large displays during performance of a secondary task
[AD-747688] p0068 N73-12120
Effects of prolonged stress on steroid levels in parotid fluid
[AD-747682] p0072 N73-13104
Evaluating the use of parotid fluid analysis as a measure of task difficulty
[AD-747671] p0073 N73-13111
The role of helicopters in emergency medical care systems
[AD-748695] p0101 N73-14087
Cytological studies of lunar treated tissue cultures
[NASA-CR-128914] p0265 N73-23054
Effect of solar irradiation on extracellular enzymes of Aeromonas proteolytica
p0292 N73-24111
Analytical and radio-histo-chemical experiments of plants and tissue culture cells treated with lunar and terrestrial materials
[NASA-CR-134036] p0416 N73-30988

TEXAS TECHNOLOGICAL UNIV., LUBBOCK.
The effects of reinforcement and responding to both signal and non-signal events on vigilance performance
[AD-747798] p0072 N73-13103
The effects of noise and response complexity upon vigilance performance
[AD-747797] p0072 N73-13105
Vigilance performance as a function of type and latency of response to the signal event
[AD-747801] p0073 N73-13110
Performance, recovery and man-machine effectiveness
[AD-750176] p0103 N73-14107
Effects of cyclical temperature on vigilance performance
[AD-748451] p0104 N73-14110
Individual differences as a function of four choice informational load and s-r compatibility
[AD-752073] p0150 N73-17115
Insulated electrocardiographic electrodes
[NASA-CASE-MSC-14339-1] p0232 N73-21151
Work-rest schedules under prolonged vibration with implications to military operations
p0271 N73-23986
Self determined work-rest cycles in the heat
p0271 N73-23987
Physiological response to prolonged muscular activity
p0271 N73-23990

TEXAS UNIV., AUSTIN.
Bandwidth reduction of sleep information, Volume 2
[AD-740946] p0605 N73-10167
The design and evaluation of an artificial ear
[AD-746691] p0073 N73-13112
Oxygen deficit-oxygen repayment relationships of men in treadmill running
p0441 N73-33013

TEXAS UNIV., HOUSTON.
Public health applications of remote sensing of the environment, an evaluation
[NASA-CR-129822] p0099 N73-14069

TEXAS UNIV., SAN ANTONIO.
Stability of human sera collected for clinical chemistry determinations
p0143 N73-17053

TORONTO UNIV. (ONTARIO).
An unstable steering task with a sonic boom disturbance
[UTIAS-TN-179] p0612 N73-11098

TRACOR, INC., AUSTIN, TEX.
The design and evaluation of an artificial ear
[AD-746691] p0073 N73-13112
TRANS WORLD AIRLINES, INC., KANSAS CITY, MO.
Flight crew health maintenance
p0146 N73-17076
TRANSLATION CONSULTANTS, LTD., ARLINGTON, VA.
Complete and isoenzyme content of lactate dehydrogenase in plasma, leukocytes and erythrocytes in myeloproliferative diseases
[NASA-TT-F-14586] p0592 N73-10070
Pre- and postoperative fluid therapy
[NASA-TT-F-14600] p0592 N73-10071
Input and output in the system of thermoregulation during rest and exercise
[NASA-TT-F-14562] p0593 N73-10074
Behavior of intraocular pressure, blood pressure and body weight under peak physical exertion
[NASA-TT-F-14557] p0608 N73-11071
Water intoxication as a side effect of chlorpropamide therapy
[NASA-TT-F-14597] p0609 N73-11077
Advantages offered by the use of fructose as monosaccharide added to saline solutions used in the oral rehydration of individuals suffering from gastroenteritis
[NASA-TT-F-14596] p0609 N73-11078
Polyvinylpyrrolidone used as cryoprotective substance for erythrocyte preservation
[NASA-TT-F-14590] p0069 N73-13076
Microelectrophoresis of human erythrocytes: Importance and uses in obstectrics and gynecology
[NASA-TT-F-14587] p0069 N73-13077
Ergonomics principles and recommendations, no. 2
[NASA-TT-F-14888] p0232 N73-21150
Mechanics of Machines, no. 27/28
[NASA-TT-F-14336] p0335 N73-26073
Second Symposium on the Theory and Principles of Manipulator Design (February 8-9, 1968)
p0335 N73-26074
Features of the kinematics of manipulators and volumes methods
p0335 N73-26075
Some remotely controlled master-slave manipulator design problems
p0335 N73-26076
Kinematic analysis of spatial slave mechanics for manipulators by the matrix method
p0335 N73-26077
Some questions of the discrete control of deep-water manipulators
p0335 N73-26078
Prospects for the building and use of computer controlled manipulators
p0335 N73-26079
Some principles involved in the construction of unamplified control systems for electromechanical manipulators
p0335 N73-26080
Principal parameters and operating indices for reversible follow-up systems
p0335 N73-26081
Some questions from the use of reversible follow-up systems with independent follow-up and force reproduction channels
p0336 N73-26082
An analytical method for the synthesis of reversible follow-up systems
p0336 N73-26083
The question of manipulator activation by reversible follow-up systems
p0336 N73-26084
An investigation of engineering methods of designing electrohydraulic follow-up drives for underwater manipulators
p0336 N73-26085
The first experiment in building an airtight magnetomechanical master-slave manipulator
p0336 N73-26086
The influence of manipulator kinematics on the selection of the geometric parameters of boxes and chambers
p0336 N73-26087
Principles of the curtailment of sources of command signal in multifunctional bioelectric control systems
p0336 N73-26088

Synchronism and heterochronism of synkinesis in man
p0336 N73-26089
The possibilities of making quantitative evaluations of the functioning of closed people-operator control systems
p0336 N73-26090
The question of modeling certain motor functions of the human arm
p0336 N73-26091
Determination of the spatial positions of the links in a manipulator mechanism
p0336 N73-26092
Ergonomics: Principles and recommendations, no. 1
[NASA-TT-F-716] p0413 N73-30079
Ergonomic prerequisites for artistic designing
p0413 N73-30080
Analysis of operator participation
p0413 N73-30081
Designing control system information models
p0414 N73-30082
Research principles and the construction of mnemonic diagrams
p0414 N73-30083
Functional states of the operator
p0414 N73-30084
Emotional state and efficiency
p0414 N73-30085
Ergonomics research methods
p0414 N73-30086
Evaluating the efficiency of man-machine systems
p0414 N73-30087
TUFTS UNIV., MEDFORD, MASS.
Pilot performance during a simulated standard instrument procedure turn with and without a predictor display
[NASA-TM-X-62201] p0150 N73-17118
TULANE UNIV., NEW ORLEANS, LA.
Mass, volume, center of mass and mass moment of inertia of the head and neck of the human body
[AD-762581] p0377 N73-29065
TWINBROOK RESEARCH LAB., ROCKVILLE, MD.
Twinbrook Research Laboratory
[PB-210613] p0596 N73-10099

U

UNION CARBIDE RESEARCH INST., TARRYTOWN, N.Y.
Predictive modeling of altitude decompression sickness in humans
[NASA-CR-114550] p0136 N73-16066
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION, PARIS (FRANCE).
A study of the agroclimatology of the highlands of eastern Africa
[WMO-339] p0446 N73-33045
UNIVERSITY OF SOUTHERN CALIF., LOS ANGELES.
Sensitivity to emotional ill health
p0144 N73-17062
Observation of arterial blood pressure of the primate
[NASA-CR-131890] p0252 N73-21980
Physiological adaptations to carbon monoxide levels and exercise in normal men
[PB-213834/1] p0267 N73-23073
UNIVERSITY OF TECHNOLOGY, LEICESTER (ENGLAND).
The effects of briefing on televisual target acquisition
p0191 N73-19972
UPPSALA UNIV. (SWEDEN).
Morphological studies of the vestibular nerve
[NASA-CR-135746] p0445 N73-33042
URS/MATRIX CO., BSSEX, MD.
Study of astronaut restraints and mobility aids in a weightless shirtsleeve environment
[NASA-CR-128590] p0603 N73-10150
URS/MATRIX CO., HOUSTON, TEX.
Application of EVA guidelines and design criteria. Volume 1: EVA selection/systems design considerations
[NASA-CR-128926] p0268 N73-23081
Application of EVA guidelines and design criteria. Volume 2: EVA workstation conceptual designs
[NASA-CR-128927] p0268 N73-23082
Applications of EVA guidelines and design criteria. Volume 3: EVA systems cost model formating
[NASA-CR-128928] p0268 N73-23083

UTAH UNIV., SALT LAKE CITY.
Biomedical engineering support
[COO-2155-4] p0102 N73-14095

V

VERMONT UNIV., BURLINGTON.
Application of frequency discrimination technique to the analysis of electroencephalographic signals
[NASA-CR-129173] p0611 N73-11091
VERSAR, INC., SPRINGFIELD, VA.
Evaluation of proposed Skylab and SSP soap products
[NASA-CR-128880] p0222 N73-20143
VIRGINIA UNIV., CHARLOTTESVILLE.
Investigation of traveler acceptance factors in short haul air carrier operations
p0591 N73-10023
Analysis of passenger acceptance of commercial flights having characteristics similar to STOL
[NASA-CR-132285] p0367 N73-27950

W

WAKE FOREST UNIV., WINSTON-SALEM, N.C.
Functional preservation of vascular smooth muscle tissue
[NASA-CR-128897] p0267 N73-23069
WALTER REED ARMY MEDICAL CENTER, WASHINGTON, D.C.
Predicting visual performance in aviators (color vision)
p0180 N73-19074
WASHINGTON UNIV., ST. LOUIS, MO.
The effect of fatique on visual search activity
[AD-750097] p0113 N73-15171
Early childhood education: Status trends, and issues related to electronic delivery
[NASA-CR-133028] p0300 N73-25131
WATERLOO UNIV. (ONTARIO).
Sustained linear acceleration
p0105 N73-15095
Rotary acceleration
p0105 N73-15096
WEBB ASSOCIATES, YELLOW SPRINGS, OHIO.
Work, heat, and oxygen cost
p0106 N73-15109
Anthropometry of Air Force women
[AD-743113] p0258 N73-22034
WEST FLORIDA UNIV., PENSACOLA.
The use of remote sensors to relate biological and physical indicators to environmental and public health problems
[NASA-CR-128727] p0135 N73-16060
WEST VIRGINIA UNIV., MORGANTOWN.
Estimation of vasopressin excretion in the Urin. as a method of monitoring vasopressin secretion during space flight
p0174 N73-18108
WISCONSIN UNIV., MADISON.
Noninvasive measurement of central venous pressure
[NASA-CR-130348] p0133 N73-16039
Operating room environment control. Part A: A valve cannister system for anesthetic gas adsorption. Part B: A state-of-the-art survey of laminar flow operating rooms. Part C: Three laminar flow experiments
p0231 N73-21141
Application of color and color infrared aerial photography to Dutch elm disease detection
p0297 N73-25110
WORLD METEOROLOGICAL ORGANIZATION, GENEVA (SWITZERLAND).
A study of the agroclimatology of the highlands of eastern Africa
[WMO-339] p0446 N73-33045
WRIGHT STATE UNIV., DAYTON, OHIO.
Some interactions among driver, vehicle, and roadway variables in normal driving
p0601 N73-10131
Vibration
p0148 N73-17059
Noise
p0148 N73-17100
WRIGHTSVILLE MARINE BIO-MEDICAL LAB., WILMINGTON, N.C.
Studies concerning the high pressure hyperexcitability in the squirrel monkey
[AD-745779] p0610 N73-11086